

FIG. 1

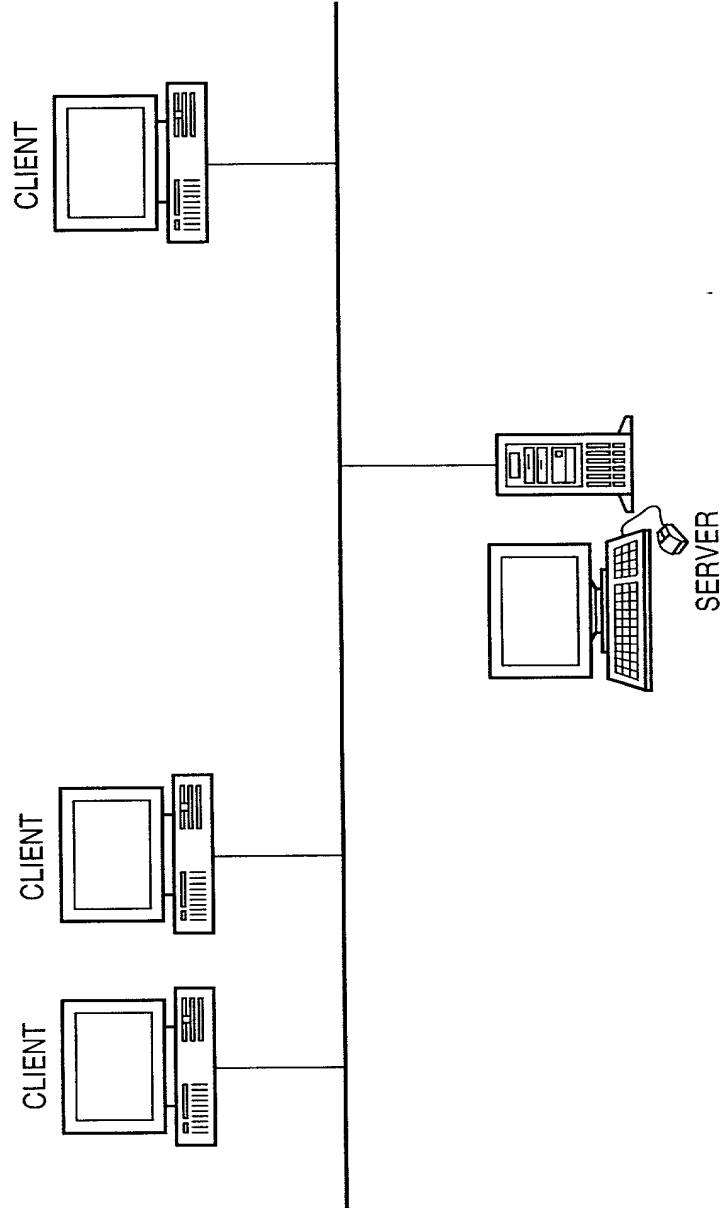


FIG. 2

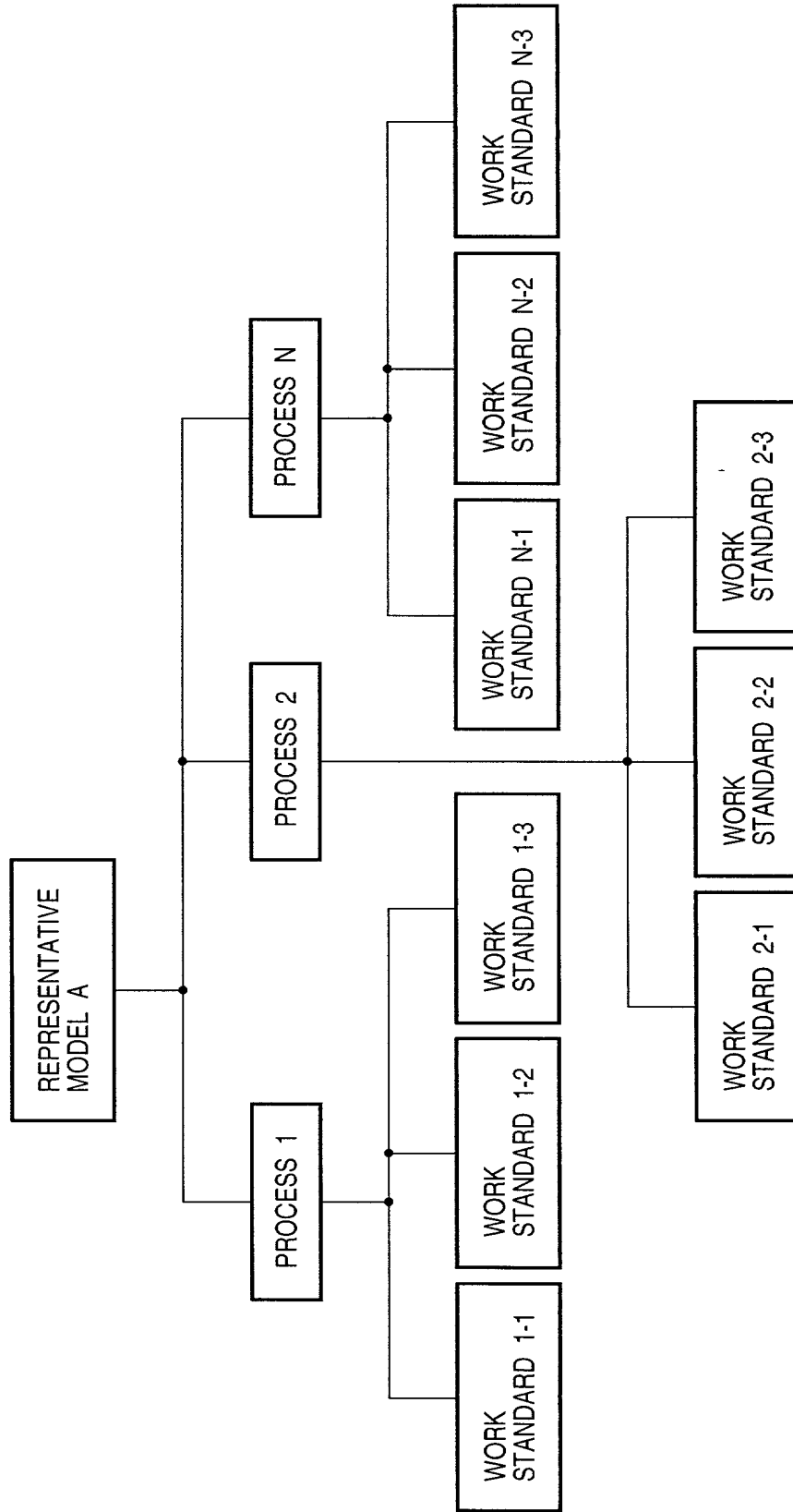


FIG. 3

WORK STANDARD 01 CREATION
300

APPLIED
301

PART NUMBER	PART NAME	QUANTITY	PART NUMBER	PART NAME	QUANTITY
303	304	305			

TOOL/TREATMENT DEVICE/AUXILIARY MATERIAL
306

307
308

WORK PROCEDURE
No.

310
313

REVISION NUMBER
CONTENTS OF REVISION
DATE
PERSON IN CHARGE

01
CREATED
1997/09/25

WORK NAME
312

MANAGEMENT NO.

FIG. 4

STRUCTURE OF MASTER FILE

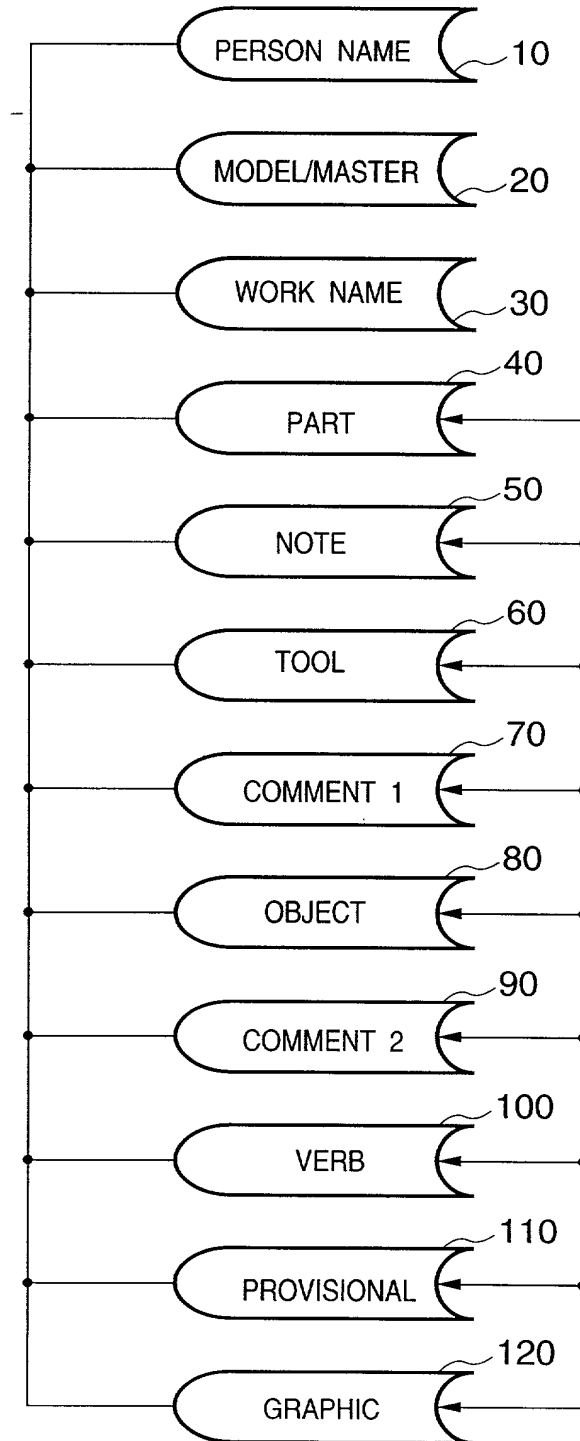


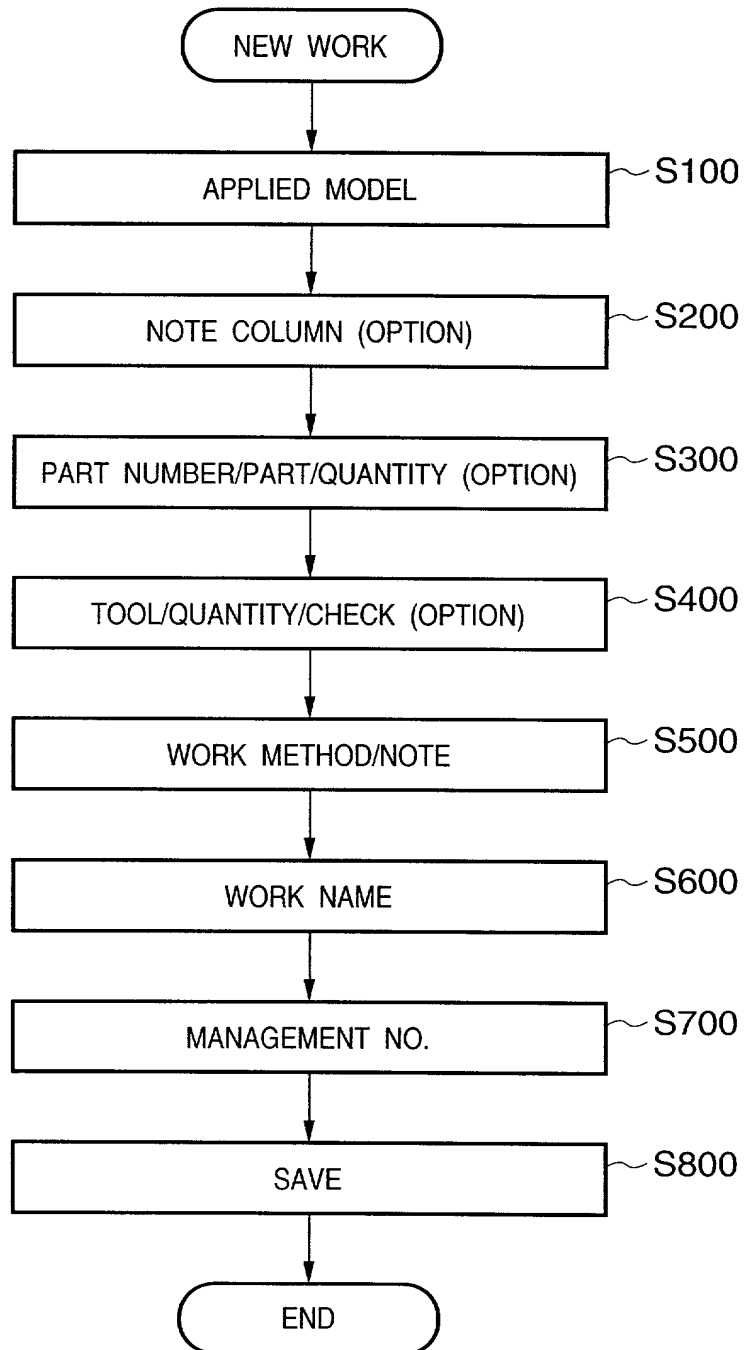
FIG. 5

FIG. 6

SELECTION OF APPLIED MODEL
LIST OF APPLIED MODELS
BJC-4200 SYSTEM
BJC-420J
BJC-420J (BLACK)
BJC-4300
BJC-430J
BJC-4200LX
A250 II Q
BJC-4200
OK
CANCEL

FIG. 8

PART NUMBER	PART NAME	QUANTITY	PART NUMBER
PART			
000 - 0000 - 001	PART 001	▲ ▼	
000 - 0000 - 002	PART 002		
000 - 0000 - 003	PART 003		
001 - 0000 - 001	PART 101		
001 - 0000 - 002	PART 102		
111 - 1111 - 001	PART 001		
A01 - 1234 - 001	TEST PART 0001		

FIG. 9

• WORK NAME

GE ____

• CANDIDATES

原稿(GENKO)ガラス保護紙セット(SET ORIGINAL GLASS PROTECTIVE SHEET)

現像(GENZOU)レール戻しバネ掛け(HOOK DEVELOPING RAIL RETURN SPRING)

現像(GENZOU)レール戻しバネ掛け(後)(HOOK DEVELOPING RAIL RETURN SPRING(AFTER))

原稿(GENKOU)台ガラスセット(SET ORIGINAL GLASS TABLE)

原稿(GENKOU)台保護紙セット(SET ORIGINAL TABLE PROTECTIVE SHEET)

現像機(GENZOUKI)トナーなしチェック(CHECK NO TONER IN DEVELOPER)

現像機(GENZOUKI)エラーチェック(CHECK ERROR IN DEVELOPER)

現像機(GENZOUKI)ロック(LOCK DEVELOPER)

FIG. 10

• WORK NAME

現像(GENZOU) —

• CANDIDATES

現像(GENZOU)レール戻しバネ掛け(HOOK DEVELOPING
RAIL RETURN SPRING)

現像(GENZOU)レール戻しバネ掛け(後)(HOOK DEVELOPING
RAIL RETURN SPRING(AFTER))

現像機(GENZOUKI)トナーなしチェック(CHECK NO TONER
IN DEVELOPER)

現像機(GENZOUKI)エラーチェック(CHECK ERROR IN
DEVELOPER)

現像機(GENZOUKI)ロック(LOCK DEVELOPER)

FIG. 11

1100

WORK STANDARD SYSTEM

WORK NAME :

WORK METHOD :

1101 (COMMENT 1)

1102 (OBJECT) ~を

1103 (COMMENT 2)

1104 (VERB) ~する

00 ※

1105a

01

1105b

1105

NOTE, STANDARD / REQUIRED QUALITY :

1106

1107

OK

CANCEL

1108

11/97

FIG. 12

WORK STANDARD SYSTEM

WORK NAME :

WORK METHOD :

1201

1202

1105b

00 ※

01

FIG. 13

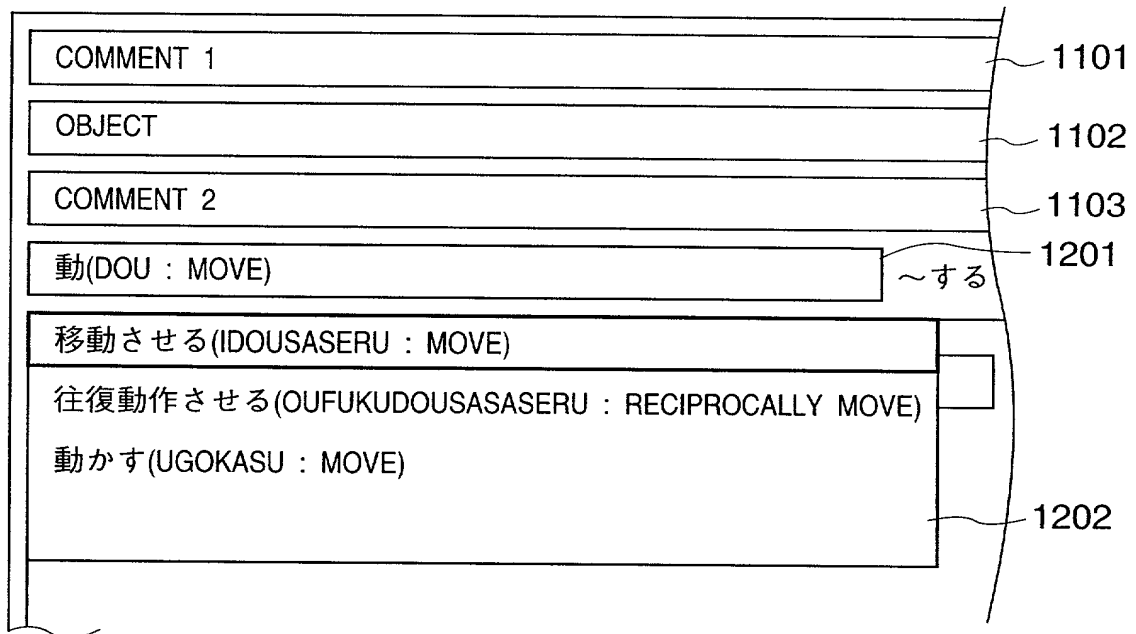


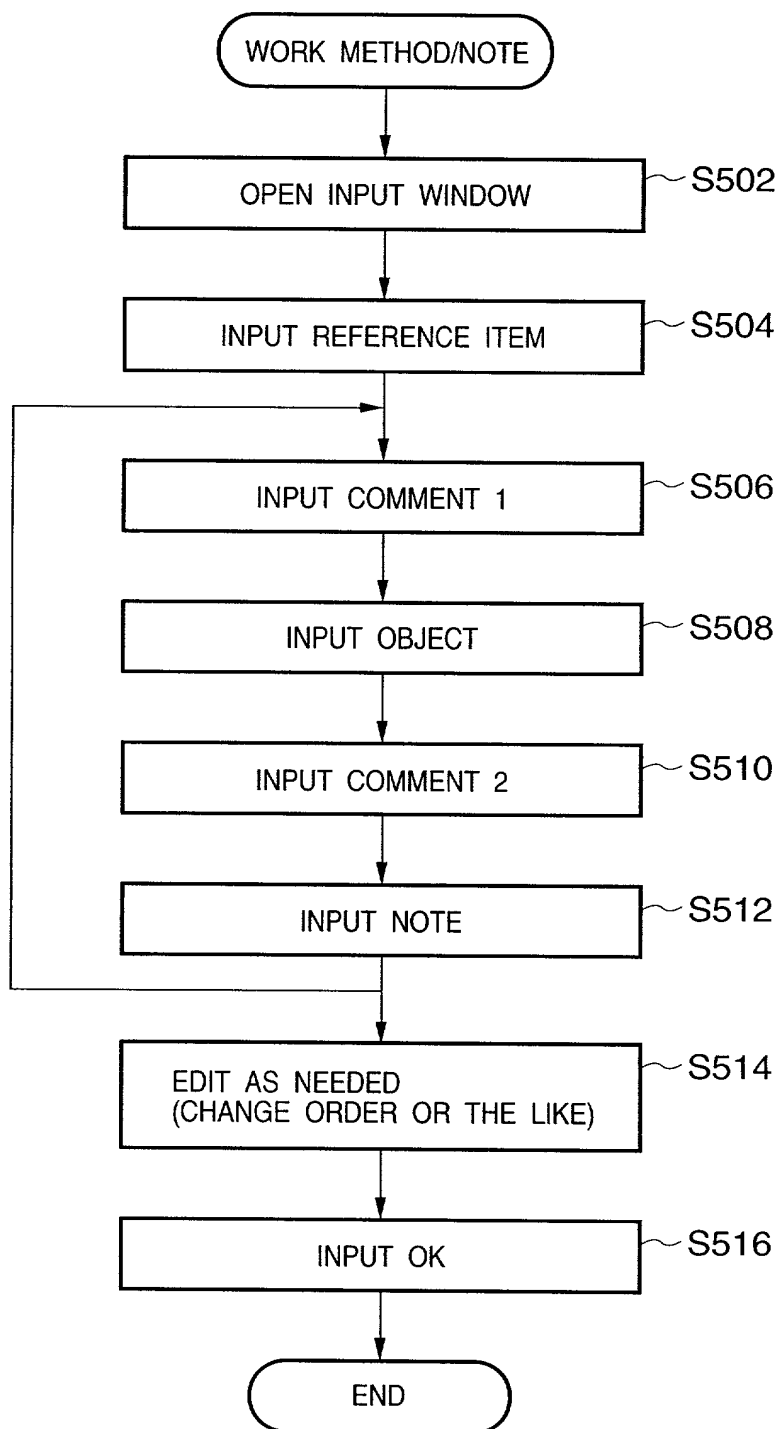
FIG. 14

FIG. 15

00	※	
01	DO zzzz SUCH THAT xxxx AT wwww POSITION BECOMES yyyy	
02	WIND AV CORD	
03	CONFIRM 100V SYSTEM	
04	SET CRG HOLDER	

FIG. 16

NOTE, STANDARD / REQUIRED QUALITY

NOTE |

SEPARATION GRIPPER MOVES SLOWLY WITHOUT GRIPPER SPRING OF ASFu
 DON'T PULL TAPE TOO STRONG TO MAKE SIDE GUIDE LOOSE
 DON'T HOOK PAPER GUIDE u ON SHEET HOLDER
 BEWARE OF IMITATIONS
 BEWARE OF IMITATIONS(Color Style Write

1601

1602

FIG. 17

NOTE, STANDARD / REQUIRED QUALITY	
1	NOTE

1107

FIG. 18

CONFIRM	
00 ※	
01 CONFIRM 100V SYSTEM	
02 WIND AV CORD	CUT(I)
03 SET CRG HOLDER	COPY(C)
04	PASTE(P)
	ADD(A)
	DELETE(D)
	UNDO
NOTE, STANDARD / REQUIRED QUALITY	REVISE(CHANGE)
	REVISE(DELETE)

1802

FIG. 19

CONFIRM	~する
00 ※	
01 WIND AV CORD	
02 CONFIRM 100V SYSTEM	
03 SET CRG HOLDER	
04	

NOTE, STANDARD / REQUIRED QUALITY

FIG. 20

CONFIRM	
00 ※	
01 WIND AV CORD	
02 SET CRG HOLDER	
03	<div><div>CUT(I) COPY(C) PASTE(P)</div><div>ADD(A) DELETE(D)</div><div>UNDO REVISE(CHANGE) REVISE(DELETE)</div></div>
NOTE, STANDARD / REQUIRED QUALITY	

1802

FIG. 21





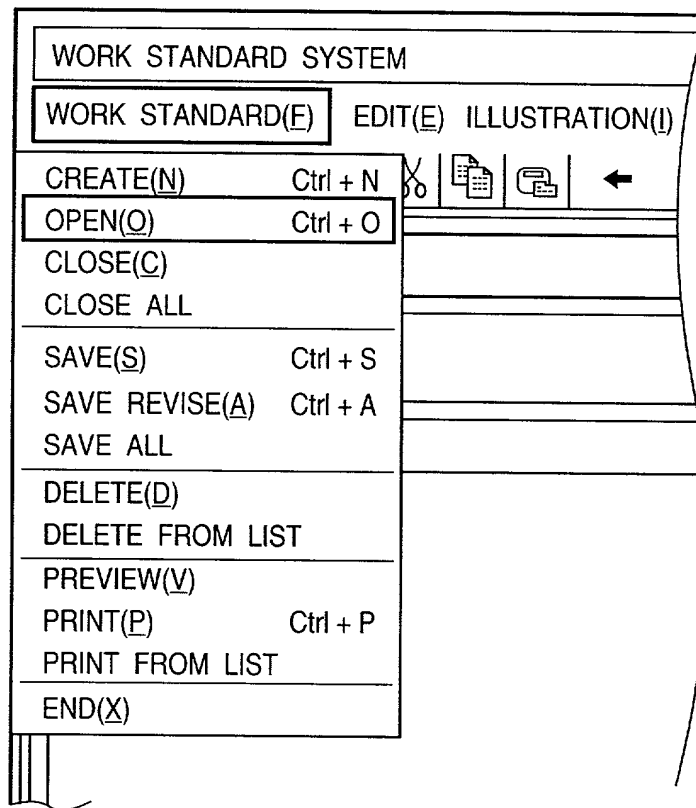
WORK STANDARD SYSTEM	
WORK STANDARD(E)	EDIT(E) ILLUSTRATION(I) SHIPMENT DESTINATION
CREATE(N) Ctrl + N	   
OPEN(O) Ctrl + O	
CLOSE(C)	
CLOSE ALL	
SAVE(S) Ctrl + S	
SAVE REVISE(A) Ctrl + A	
SAVE ALL	PART
DELETE(D)	
DELETE FROM LIST	
PREVIEW(V)	
PRINT(P) Ctrl + P	
PRINT FROM LIST	
END(X)	

FIG. 22

WORK STANDARD SYSTEM			
<input checked="" type="radio"/> LATEST REVISION NUMBER <input type="radio"/> ALL			
MANAGEMENT NO.	REVISION NUMBER	WORK NAME	DATE OF REGISTRATION
SO - 04 - 01(4) - E	01	ASFu取付	1997/09/13
SO - 01 - 01(3) - E	01	ベース・トレーu取付	1997/09/01
SO - 01 - 03 - E	01	ベース・トレーu取付	1997/09/01
SO - 01 - 04 - E	01	ベース・トレーu取付	1997/09/01
<hr/>			
SO - 06 - 01 - E	01	線処理	1997/09/01
SO - 06 - 02 - E	01	線処理	1997/09/01
SO - 06 - 03 - E	01	線処理	1997/09/01
SO - 07 - 01(2) - E	01	レールグリス塗布	1997/09/01
SO - 08 - 01 - E	01	レール取付	1997/09/01

FIG. 24





SYSTEM			
EDIT(E)		ILLUSTRATION(I)	SHIPMENT DESTINATION(S)
		VIEW(V)	 
		EDIT(E)	
01 CREATE		PowerPoint	
		✓ Canvas	

FIG. 25

FIG. 25

302

WORK STANDARD 01 CREATION

APPLIED

PART NUMBER

303

PART NAME

TOOL / TREATMENT DEVICE

No.

WORK PROCEDURE

FILE NAME :

2501 2502 2503 2504

2500

CLEAR

UPDATE

CLOSE

REVISION NUMBER

01

CONTENTS OF REVISION

CREATED

DATE

1997/09/25

PERSON IN CHARGE

APPROVE

WORK NAME

MANAGEMENT NO.

FIG. 26

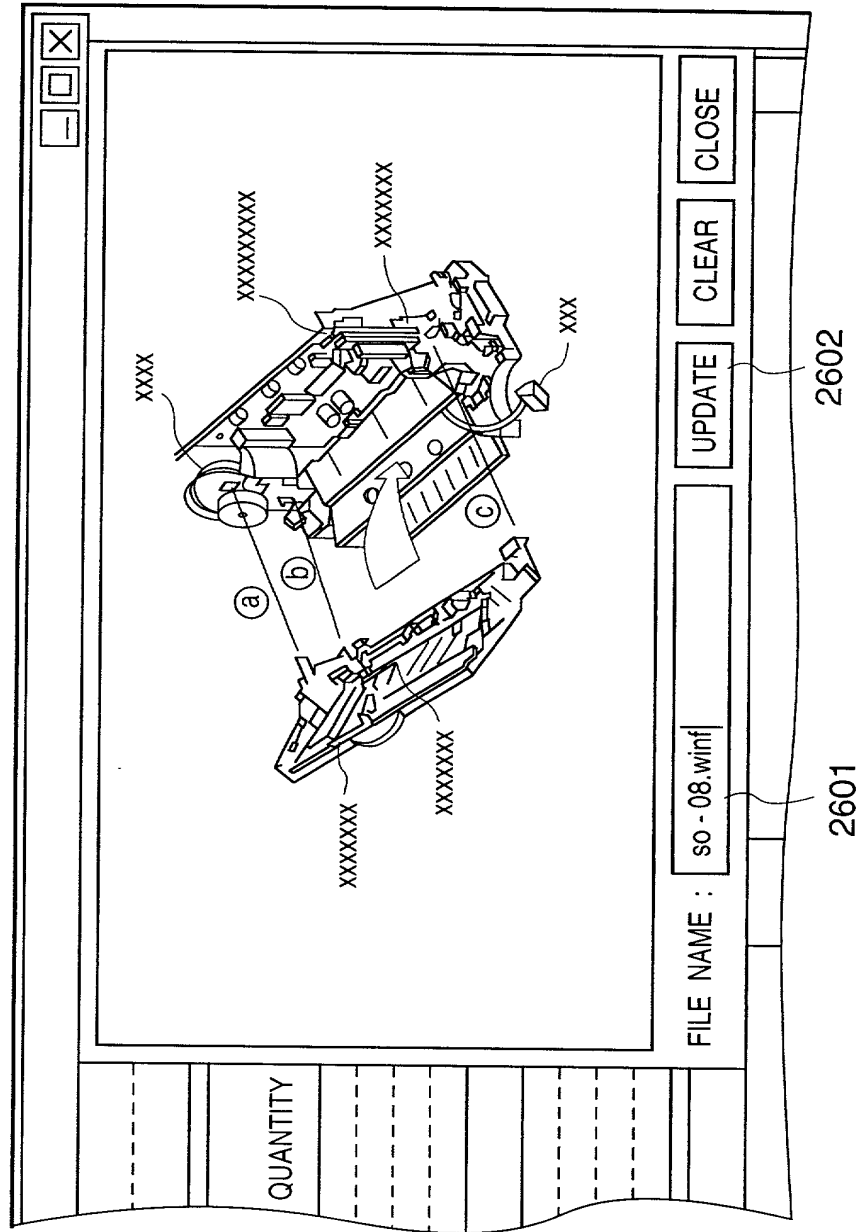


FIG. 27

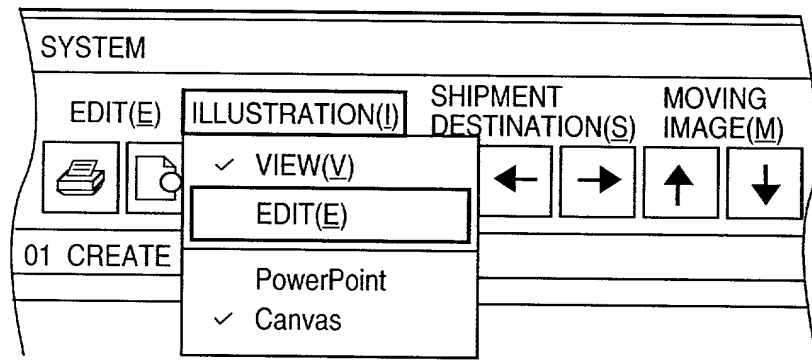
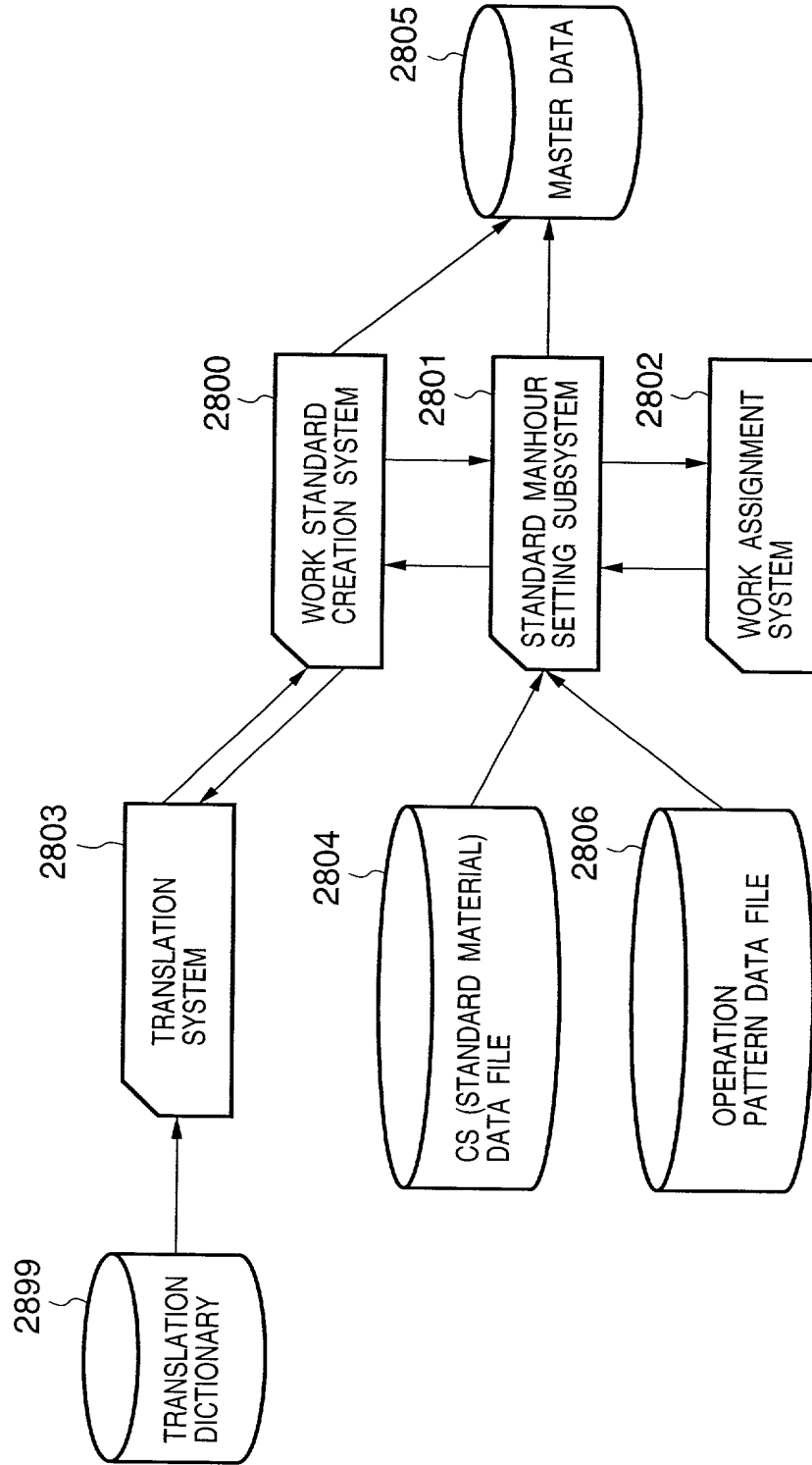


FIG. 28



F I G. 29

WORK STANDARD : TRANSLATION SYSTEM (PROTOTYPE) [X]

☒ WORK STANDARD DATA

☐ MASTER DATA

UPLOAD WORK STANDARD

DOWNLOAD WORK STANDARD

TRANSLATE WORK STANDARD

END

FIG. 30

3001 3002 3003 3004

TRANSLATION OF WORK STANDARD

REPRESENTATIVE MODEL NAME : A252

PREPUCES NAME : PLATEN UNIT

☐ TOTAL
☒ ASSEMBLY

☒ ALL
☐ UNTRANSLATED
☐ UNCHECKED

☐ JAPANESE
☒ ENGLISH

3000

MANAGEMENT NO.	REVISION NUMBER	WORK NAME	AUTOMATIC TRANSLATION CHECK	
PT-010-010	01	クリーナーu取付	X	X
PT-010-020	01	クリーナーu取付	X	X
PT-010-030	01	クリーナーu取付	X	X
PT-070-030	01	切換アームAssy組立	X	X
PT-080-010	01	伝達ローラu取付	X	X
PT-090-010	01	伝達ローラu取付	X	X
PT-100-010	01	紙押え取付	X	X

3006

3007 3008 3005

3101

[illegible]

FIG. 32

3200

WORK PROCEDURE	
VOICE(W)	
JAPANESE	
WORK PROCEDURE	
ブレードレバネをブレードレバ-の ① 部に引っ掛ける	
01 ブレードレバ-ハネをブレードレバ-の ① 部に引っ掛ける	
02 ブレードレバ-を矢印 ② 方向にスライドさせ引っ掛かり無くハネで戻れることを確認する	
03 ブレードレバ-軸先端がブレードホルダ-先端まで圧入されていることを確認する	
ENGLISH	
Procedure	
The blade lever spring hooks to ① of the blade lever.	
01 The blade lever spring hooks to ① of the blade lever.	
02 Side the blade lever in the direction of arrow ② and there is no catch, and n....	
03 Check press-fitting the blade lever shaft leading edge to the braid folder leading ed....	
<div style="display: flex; justify-content: space-between; align-items: center;"> ◀ ▶ </div>	
<div style="display: flex; justify-content: flex-end; gap: 10px;"> <div style="border: 1px solid black; padding: 2px 10px;">TRANSLATE</div> <div style="border: 1px solid black; padding: 2px 10px;">OK</div> <div style="border: 1px solid black; padding: 2px 10px;">CANCEL</div> </div>	

3201

3202

3203

3204

—

TRANSLATION OF WORK STANDARD (PROTOTYPE)	
WORK STANDARD(E) ILLUSTRATION(I)	VOICE(S) POW(W)
WORK STANDARD PN-030-020 01 New	PLAY(P)
	NEW(N)
	DRIVE(D)
Model QG5-1317	

FIG. 34

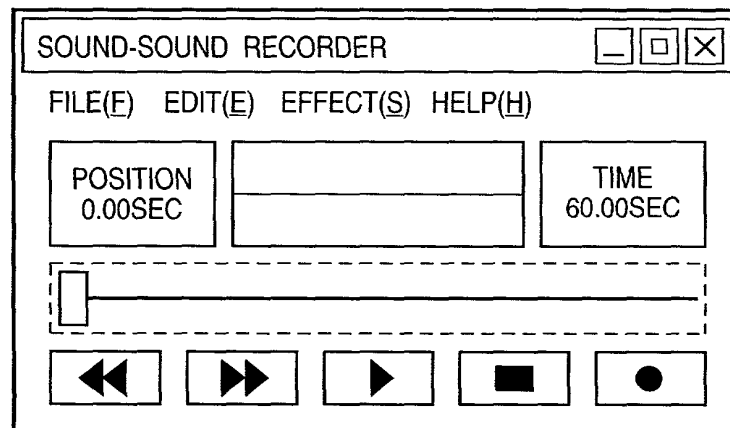
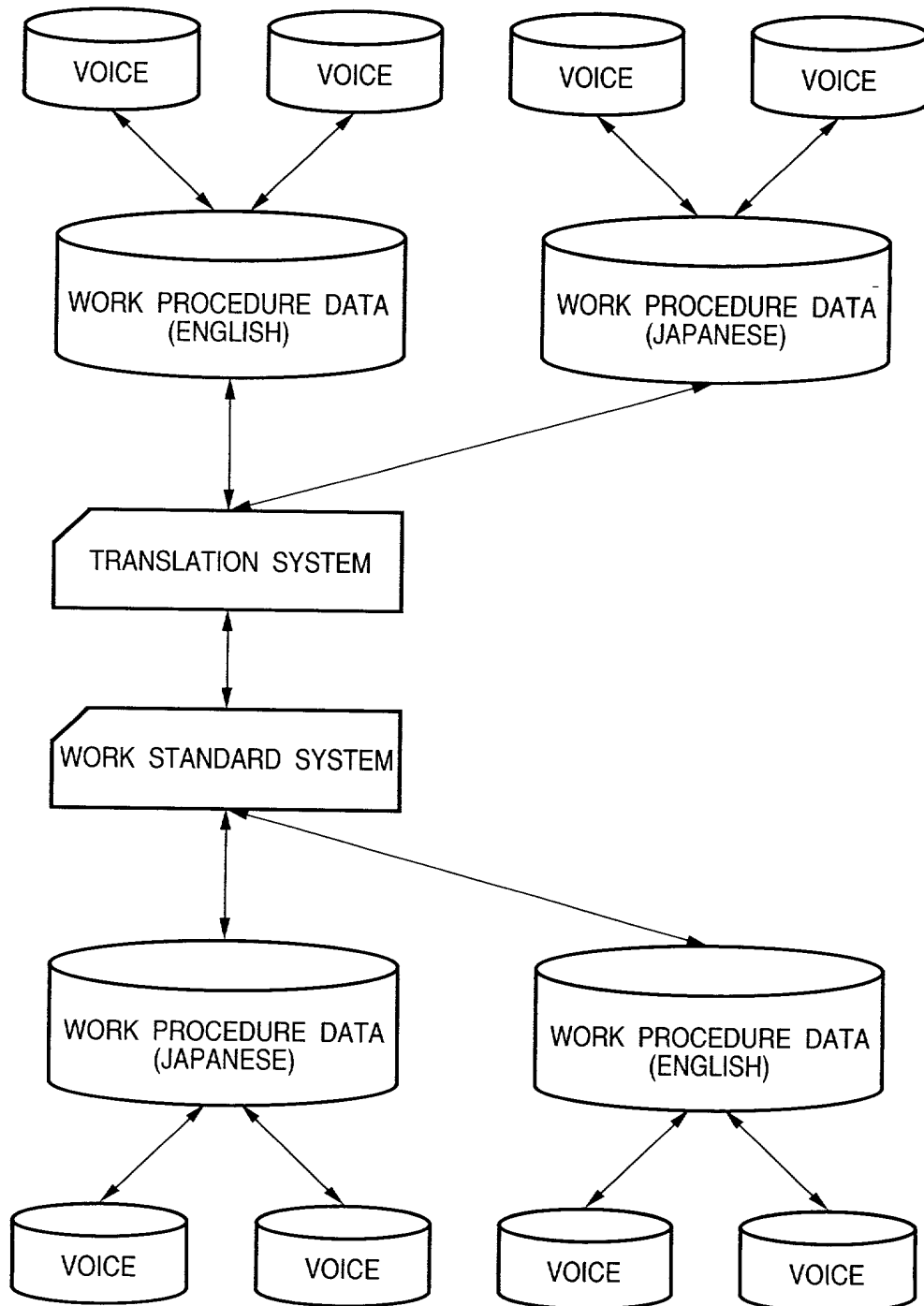
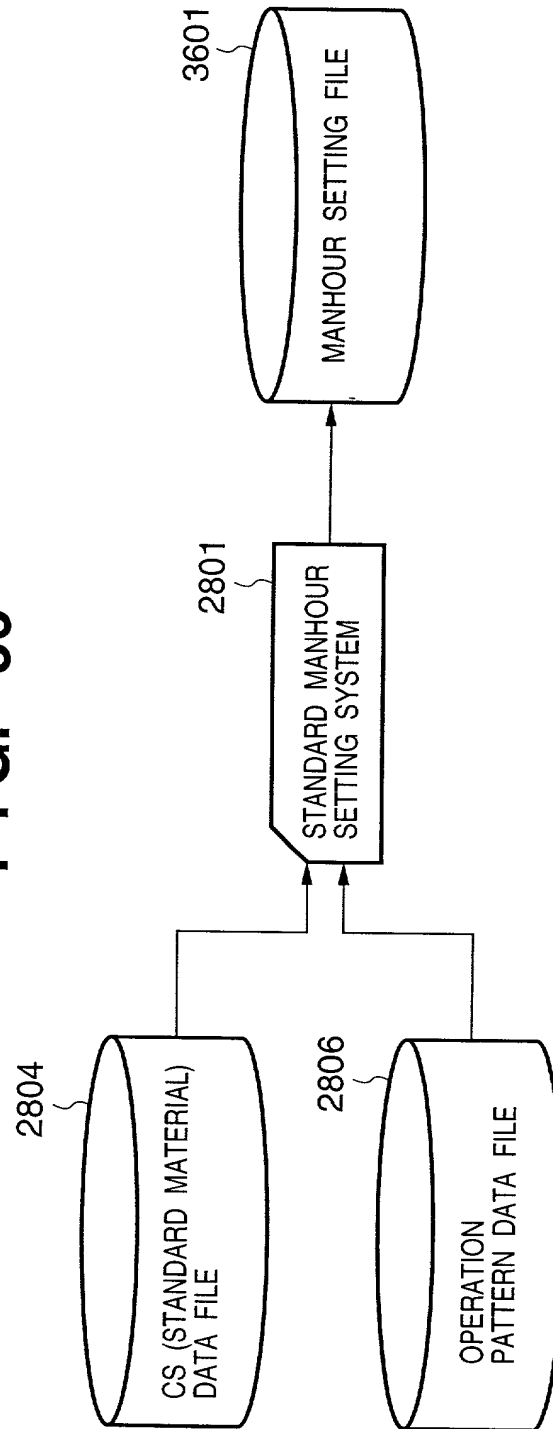


FIG. 35

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11.0000

No.	ELEMENT WORK NAME	FREQUENCY	MANHOUR	CS	SET CONDITION

COMMENT 1	OBJECT	COMMENT 2	VERB	SET CONDITION DATA

FIG. 39

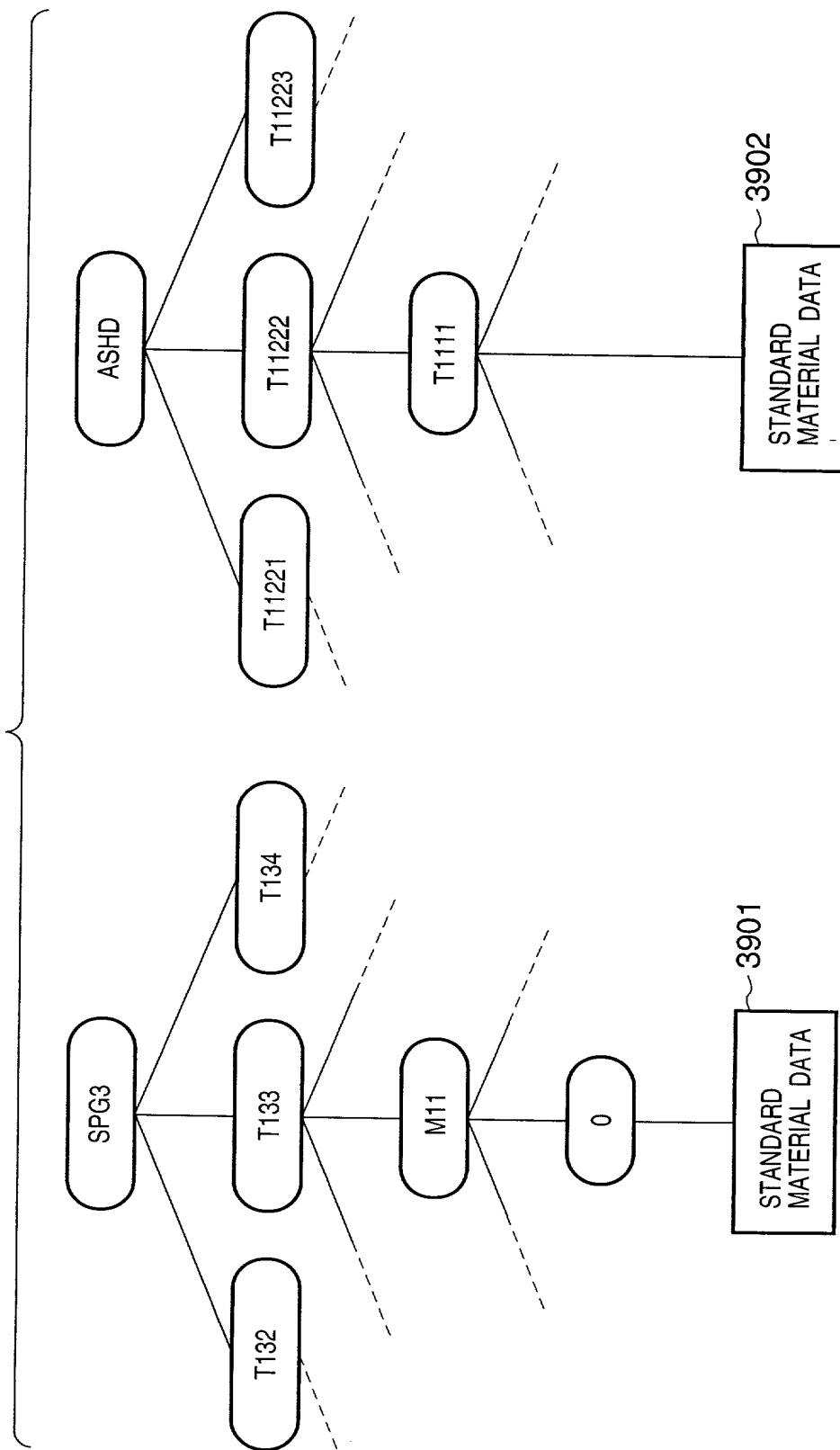


FIG. 40

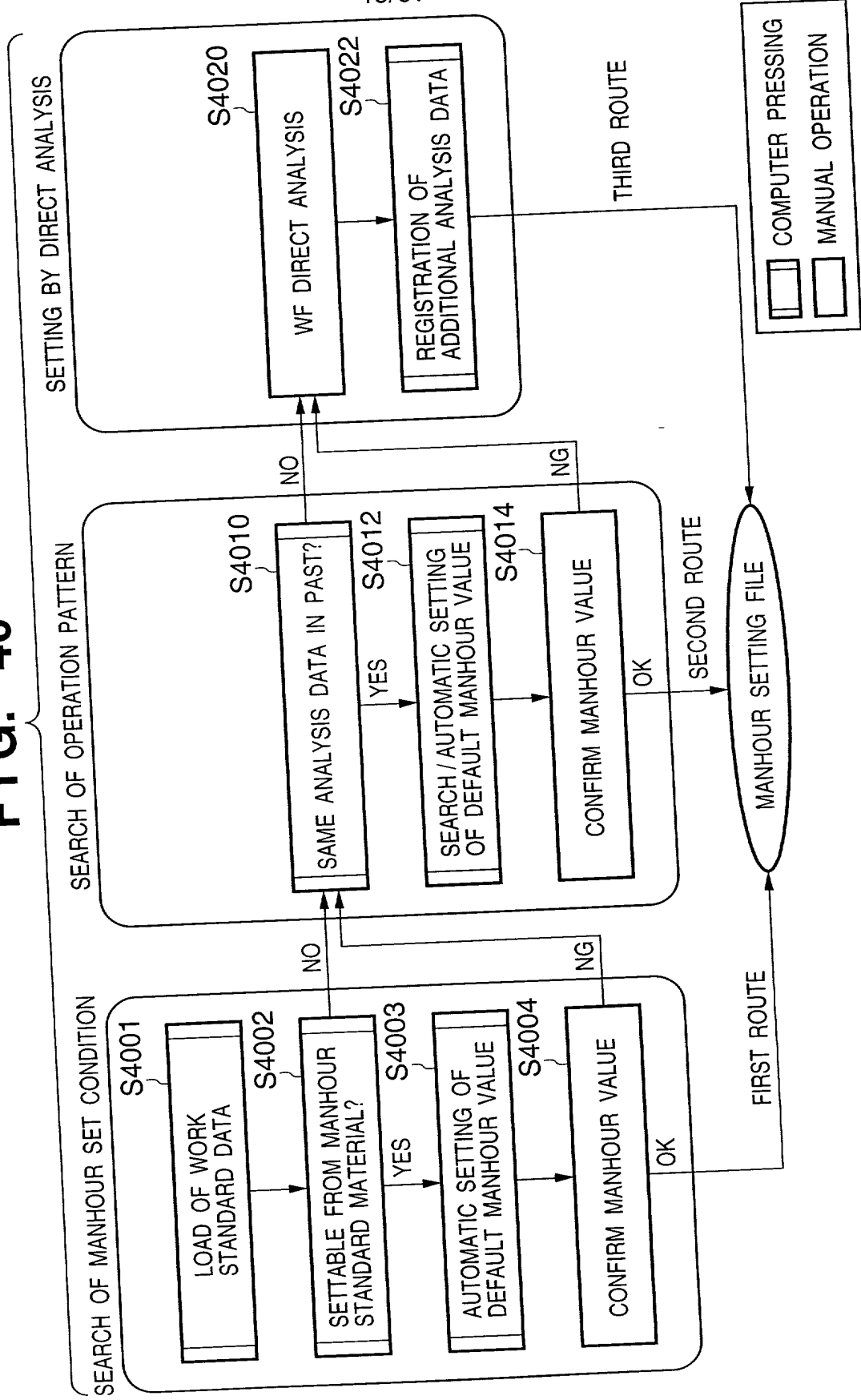
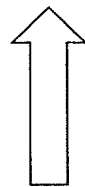


FIG. 41

3601

[illegible]

DATA LOAD

● ELEMENT WORK NAME

No.	COMMENT 1	OBJECT	COMMENT 2	VERB
1		負荷バネを	負荷バネ取付治具に	組込む
2	治具の	SWを		ONする
3		分離ロー軸を	負荷バネ取付治具に	組込む
4	治具の	SWを		OFFにする
5		分離ロー軸を	治具より	外す

FIG. 42

3601

EDITING OF ELEMENT WORK						
FILE(F) EDIT(E) VIEW(V) ANALYZE(A) ANALYSIS MATERIAL(B) CS(S) END(X)						
UNIT WORK NAME : SEPARATION ROLLER ATTACHMENT						
No.	ELEMENT WORK NAME	FREQUENCY		MANHOUR	CS	SET CONDITION
1	負荷ハネを負荷ハネ取付治具に組込む (SET LOAD SPRING IN TREATMENT DEVICE FOR ATTACHING LOAD SPRING)	1	1	41	SPG3	T133 / M11 / 0
2	治具のSWをONにする (TURN ON SW OF TREATMENT DEVICE)	1	1	8		
3	分離ロー軸を負荷ハネ取付治具に取込む (SET SEPARATION ROLLER SHAFT IN TREATMENT DEVICE FOR ATTACHING LOAD SPRING)	1	1	37	ASHD	T11222 / T1111
4	治具のSWをOFFにする (TURN OFF SW OF TREATMENT DEVICE)	1	1	8		
5	分離ロー軸を治具より外す (DETACH SEPARATION ROLLER SHAFT FROM TREATMENT DEVICE)	1	1	16	PUMB	T2111 / T111111

MATCH

SEARCH KEYWORD(KW)

No.	COMMENT 1	OBJECT	COMMENT 2	VERB	MANHOUR STANDARD MATERIAL	TIME VALUE
1	*	*ハネを	*に	組込む	SPG3 T133 / M11 / 0	41RU
2	*	*を	*に	組込む	ASHED T11222 / T1111	37RU
3	*	*を	*より	外す	PUMQ T2111 / T111111	16RU
4	*	*エリングを	*	組込む	RIN2 T11211 / SO	76RU
5	*	*コネクタを	*	差し込む	CONN T11211 / SO	41RU
6	*	*	*	増し締めする	SCR6 M211 / 1	23RU

2804

FIG. 43

3601

EDITING OF ELEMENT WORK						
FILE(F) EDIT(E) VIEW(V) ANALYZE(A) ANALYSIS MATERIAL(B) CS(S) END(X)						
UNIT WORK NAME : SEPARATION ROLLER ATTACHMENT						
No.	ELEMENT WORK NAME	FREQUENCY		MANHOUR	CS	SET CONDITION
1	負荷ハネを負荷ハネ取付治具に組込む (SET LOAD SPRING IN TREATMENT DEVICE FOR ATTACHING LOAD SPRING)	1	1	41	SPG3	T133 / M11 / 0
2	治具のSWをONにする (TURN ON SW OF TREATMENT DEVICE)	1	1	8		/GET:-50E/M:-10E
3	分離ロー軸を負荷ハネ取付治具に取込む (SET SEPARATION ROLLER SHAFT IN TREATMENT DEVICE FOR ATTACHING LOAD SPRING)	1	1	37	ASHD	T11222 / T1111
4	治具のSWをOFFにする (TURN OFF SW OF TREATMENT DEVICE)	1	1	8		/GET:-50E/M:-10E
5	分離ロー軸を治具より外す (DETACH SEPARATION ROLLER SHAFT FROM TREATMENT DEVICE)	1	1	16	PUMB	T2111 / T111111

MATCH

No.	COMMENT 1	OBJECT	COMMENT 2	VERB	VERB PATTERN	TIME VALUE
1	治具の	SWを		ONする	/GET:-50E/M:-10E	8RU
2	治具の	SWを		OFFする	/GET:-50E/M:-10E	8RU
3		読取操作部uを		閉める	/GET:-50E/M:-50E	10RU
4		CRGト`アを		閉める	/GET:-50E/M:-50E	10RU
5		読取操作部uを		閉める	/GET:-50E/M:-50E	10RU
6		電源コト`を		抜く	/GET:-50EGr2/M:-10E	16RU
7		測定用電源コト`を		抜く	/GET:-50EGr2/M:-10E	16RU

2806

3601

✕
□
|

FILE(F) EDIT(E) VIEW(V) ANALYZE(A) ANALYSIS MATERIAL(B) CS(S) END(X)

UNIT WORK NAME : SEPARATION ROLLER ATTACHMENT

[illegible]

FIG. 45

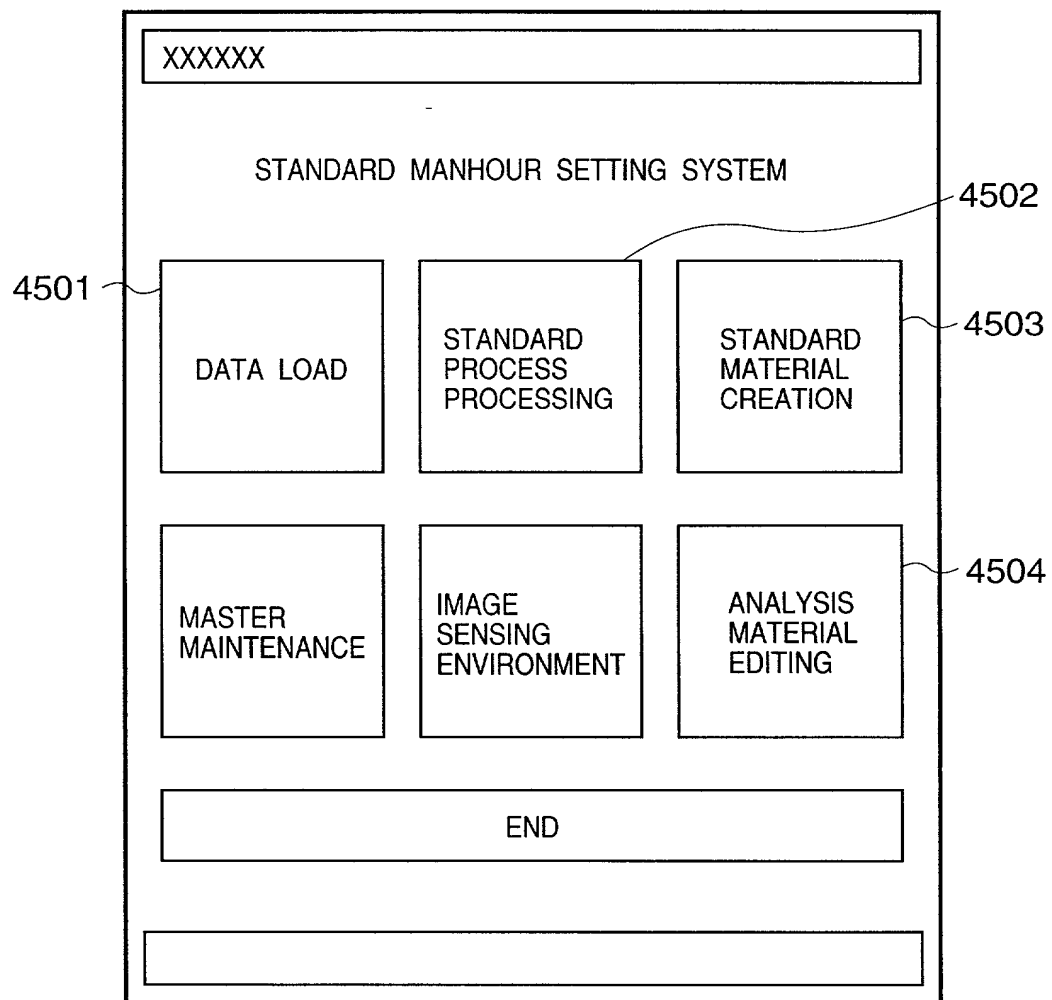


FIG. 46

4609 4610 4612

XXXXXXX

☒ ALL ☐ DESIGNATE : 1

PRODUCT NUMBER :

NAME :

PRODUCT NUMBER	WORK STANDARD	PRODUCT SYMBOL	NAME	PREVIOUS LOAD DATE
0 - CLOCK	XXXX	XX	XXXX	XXX
XXXXXX		BL - OLD	SET IN 1996	
xyz - test test - 01 tesr - AMI				

4601

4611 4602 4603 4604 4605 4606

SELECT

CANCEL

OK

$\frac{1}{\sqrt{\pi}} \int_{-\infty}^{\infty} f(x) e^{-x^2} dx = f(0)$

[illegible]

FIG. 48

LOAD OF DATA

COMPONENT DESIGNATION

☐ ALL

☒ DESIGNATE COMPONENT

CH

AUTOMATIC MANHOUR SETTING

☒ STANDARD MATERIAL(CS)

☒ ANALYSIS MATERIAL

EXECUTE

CANCEL

4805 4804

4800

4801

4802

4803

4806

FIG. 49

FIG. 49

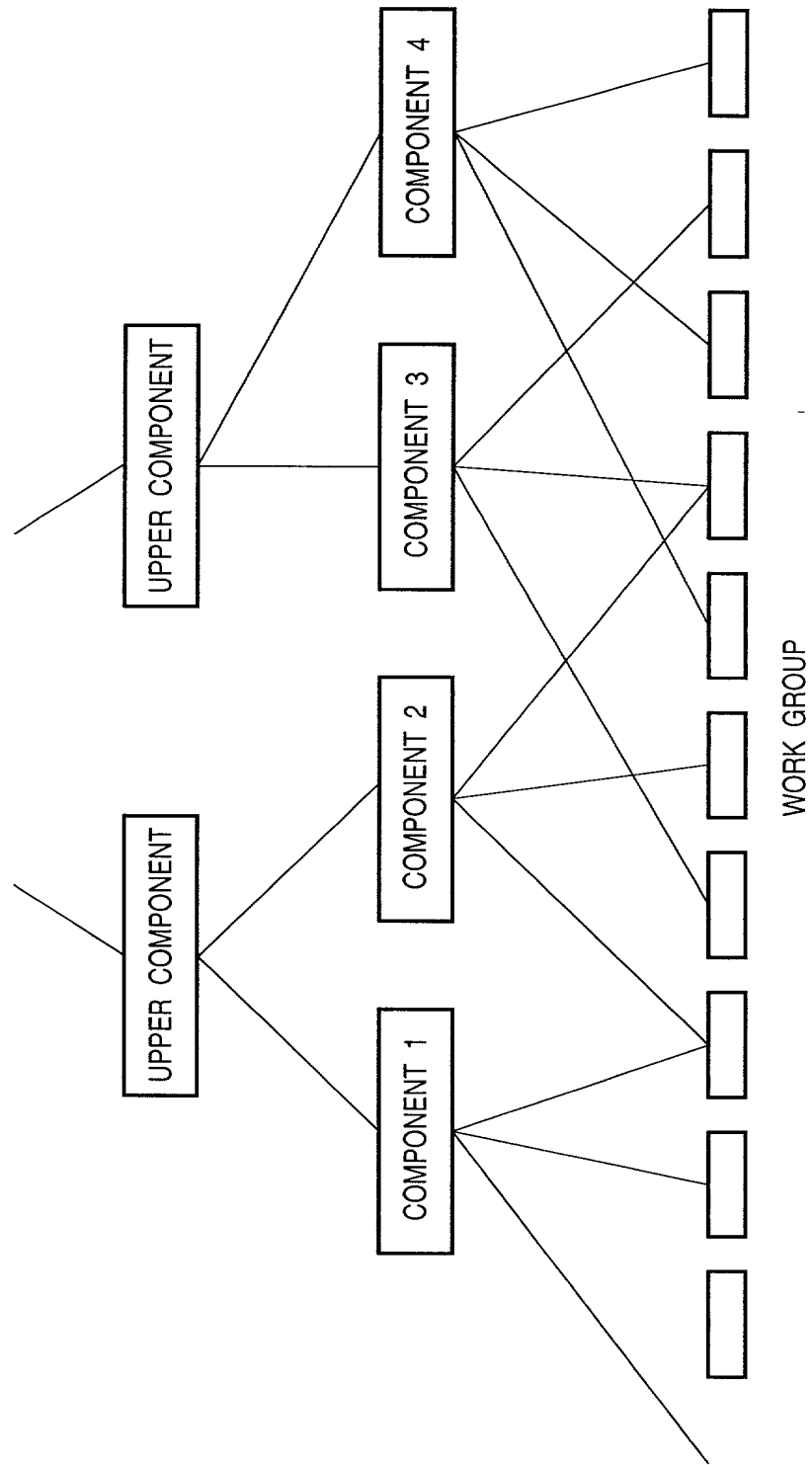


FIG. 50

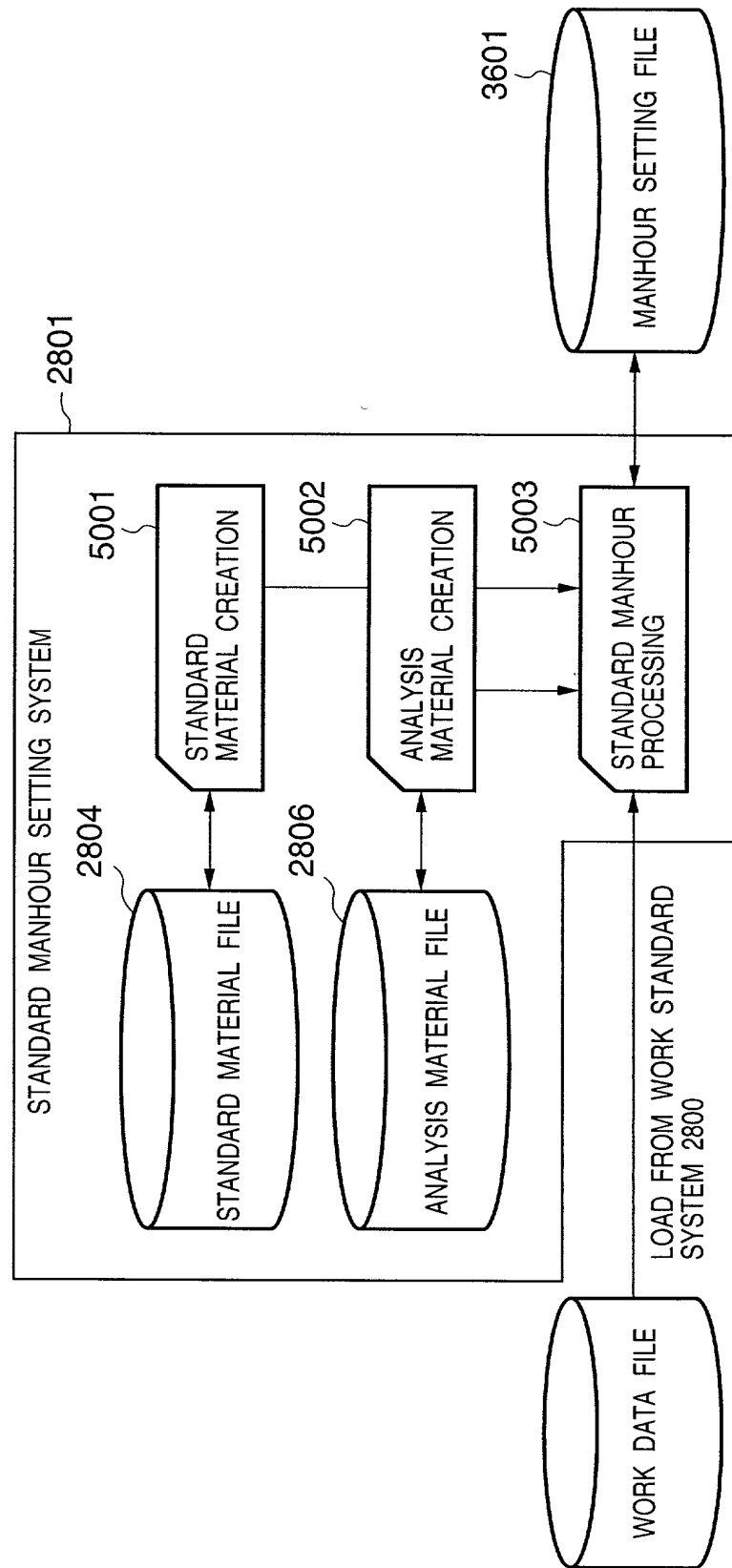
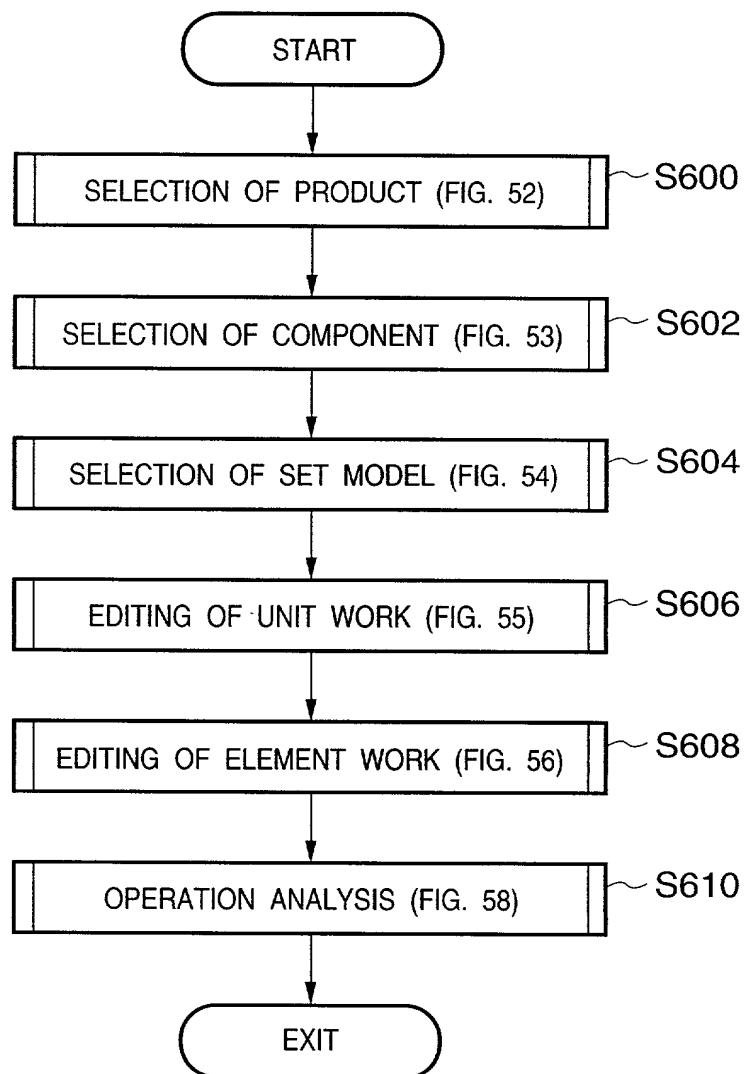


FIG. 51



1999

5201

[illegible][illegible]

(The page contains faint, illegible markings or bleed-through from the reverse side.)

(The page contains faint, illegible markings or bleed-through from the reverse side.)

—

5501 5507 5506 5502 5503 5504 5505

FIG. 56

XXXXXX

🔍

📄

✖

📄

📄

FORMAL MANAGEMENT NO. PU-03-01 UNIT WORK NAME : MOTOR ATTACHMENT TOTAL MANHOUR :

0

 NEXT UNIT WORK

NO.	ELEMENT WORK NAME	REVISION	MANHOUR	USE	CS	SET CONDITION
▶ 1	LFモータのケーブルと反対側の軸にダブルギア	1	0	0		
*						

COMMENT 1 : LFモータのケーブルと反対側の軸に

OBJECT : タブルギアを

COMMENT 2 : ギア径の小さい方から

VERB : 取付ける

設定

5604 5605 5603 5602 5601

FIG. 57

EDITING OF ANALYSIS MATERIAL

FILE(E) EDIT(E) VIEW(V)

PRODUCT GENRE :

TYPE	COMMENT 1	OBJECT	COMMENT 2	VERB	ANALYSIS SYMBOL	MANHOURL	USE	FREQUENCY	COUNT	SET DATE
▶	I7-キャップ:	本体を	矢印1の様に	入れる	-50/Gr1/N/>6/-3	15	0	1	0	97/09/09 9:52
	I7-キャップ:	本体を	矢印1の様に	入れる	-50/E/02/N/-6	11	0	1	0	97/09/09 9:53
	I7-キャップ:	本体を	矢印1の様に	入れる	-50/Gr1/N/>6/-3	15	0	1	0	97/09/09 9:55
		要素作業01		動詞	-50/Gr1/N/>6/-3	15	0	1	0	97/09/10 16:34
	I7-キャップ:	本体を	矢印1の様に	入れる	-50/Gr1/N/>6/-3	15	0	1	0	97/09/10 19:09
		キャリッジロック		塗布する	Time100/Rate100	100	100	1	1	97/09/10 19:16
	モーター組立:	フリンダジャー		入れ、セットする	M211/1/10	50	1	1	1	97/09/11 17:00
		フリンダジャー		裏面にする	T1221/M2311/0/0	12	0	1	0	97/09/11 17:34
		1		1	T2221/M1211/0/1	24	0	1	0	97/09/11 17:20
		2		2	T1221/M2311/0/0	12	0	1	0	97/09/11 17:24
		フリンダジャー	PRカ'イト'取付る	セットする		15	0	1	0	97/09/12 11:24
		dgdlatdlat		fdasfdasfdas	*	16	0	1	0	97/09/12 12:10
		dsdsfisdasaf		fdasfdadddds	T21121/M1111/0/1	13	0	1	0	97/09/12 12:10
		dgdlatdlat		fdasfdasfdas	*	16	0	1	0	97/09/12 13:39
		フリンダジャー	PRカ'イト'取付る	セットする		15	0	1	0	97/09/12 14:00
		フリンダジャー	PRカ'イト'取付る	セットする		15	0	1	0	97/09/12 14:00
		フリンダジャー		セットする	Time100/Rate100	100	100	1	0	97/09/12 14:04

FIG. 58

5801		5802		5803		5804		5805	
OPERATION ANALYSIS									
<div><div><div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div>1 SET MAIN BODY TO PREDETERMINED POSITION</div><div>TOTAL SIMO VALUE : 0</div><div>TOTAL MANHOURLY VALUE : 15</div><div>SIMO</div><div>NEXT ELEMENT WORK</div></div></div></div></div>									
NO.	CONTENTS OF OPERATION	WF/OS	SET CONDITION	MANHOURLY	USE	REMARKS			
1	XXXXXX	PU	-60/Gr1/N/>6/-3	15	0				
*									

FIG. 59

5901

☐ 1. PU

☐ 2. GET

☐ 3. M

☐ 4. MA

☐ 5. ASY

☐ 6. DSY

☐ 7. R

☐ 8. UMAC

☐ 9. MP

☐ 10. BODY

☐ 11. PU

☐ 12. GET

☐ 13. M

☐ 14. MA

☐ 15. ASY

☐ 16. DSY

☐ 17. R

☐ SIMO

SELECT

CANCEL

5902

FIG. 60

XXXXXX

PU

PICK UP

MANUAL

1 :	MOVING DISTANCE	1	-10cm	2	+10cm	3	>50cm	4	5	6
2 :	GRIP TYPE		Qr-3		Qr-2					
3 :	PRE-POSITIONING		NO		YES					
4 :	MAIN SIZE		-10mm		-6mm					
5 :	WEIGHT		<3Kg		>3Kg					
6 :										

SET

CANCEL

SET VALUE

FORMULA

6001
6002
6003

FIG. 61

FORMULA

TURNCHANGE DIRECTION OF BODYMANUAL

FORMULA : 10 * m

VARIABLE

m :

n :

p :

q :

r :

s :

VARIABLE NAME

THE NUMBER OF TIMES OF OPERATION OF CHANGING DIRECTION

VALUE

UNIT

COUNT

6102

6103

6104

6105

FIG. 62

The figure shows a graphical user interface window titled "INQUIRY OF LOG". The window contains the following elements:

- 6201**: The title bar of the window, containing the text "INQUIRY OF LOG".
- 6202**: A text input field for "VARIATION AMOUNT" containing the value "10".
- 6203**: A text input field for "USE" containing the value "0".
- 6204**: A text input field for "REASON CODE" containing the value "1".
- 6205**: A dropdown menu for "CHANGE REASON" with the current selection "SET".
- 6206**: Two buttons at the bottom, "OK" and "Clear".

FIG. 63

6301 6302

CORRECTION OF CHANGE LOG

DATE

1997 09 22

☐ = ☐ FROM
☒ BEFORE ☐ ~

SEARCH

NO.	UNIT WORK NAME	CODE	CHANGE REASON	NEW MANHOURL	(NEW) MANHOURL	PREVIOUS (PREVIOUS) MANHOURL	(PREVIOUS) USE	CHANGE DATE
▶ CH-01-01	ELECTRICAL CHECK	1	SET	10	10	0	0	1997/09/22 14:30.00

REASON CODE 1

CHANGE REASON SET

OK

Ctrl

END

FIG. 64

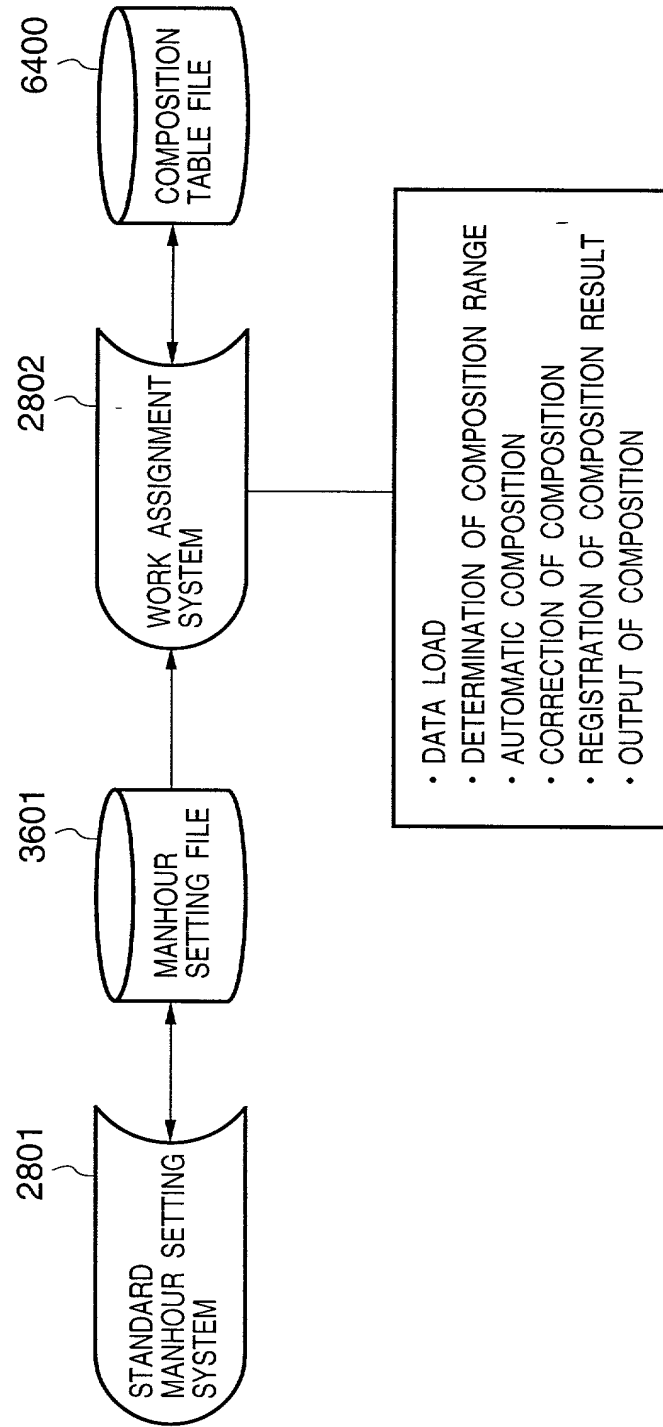
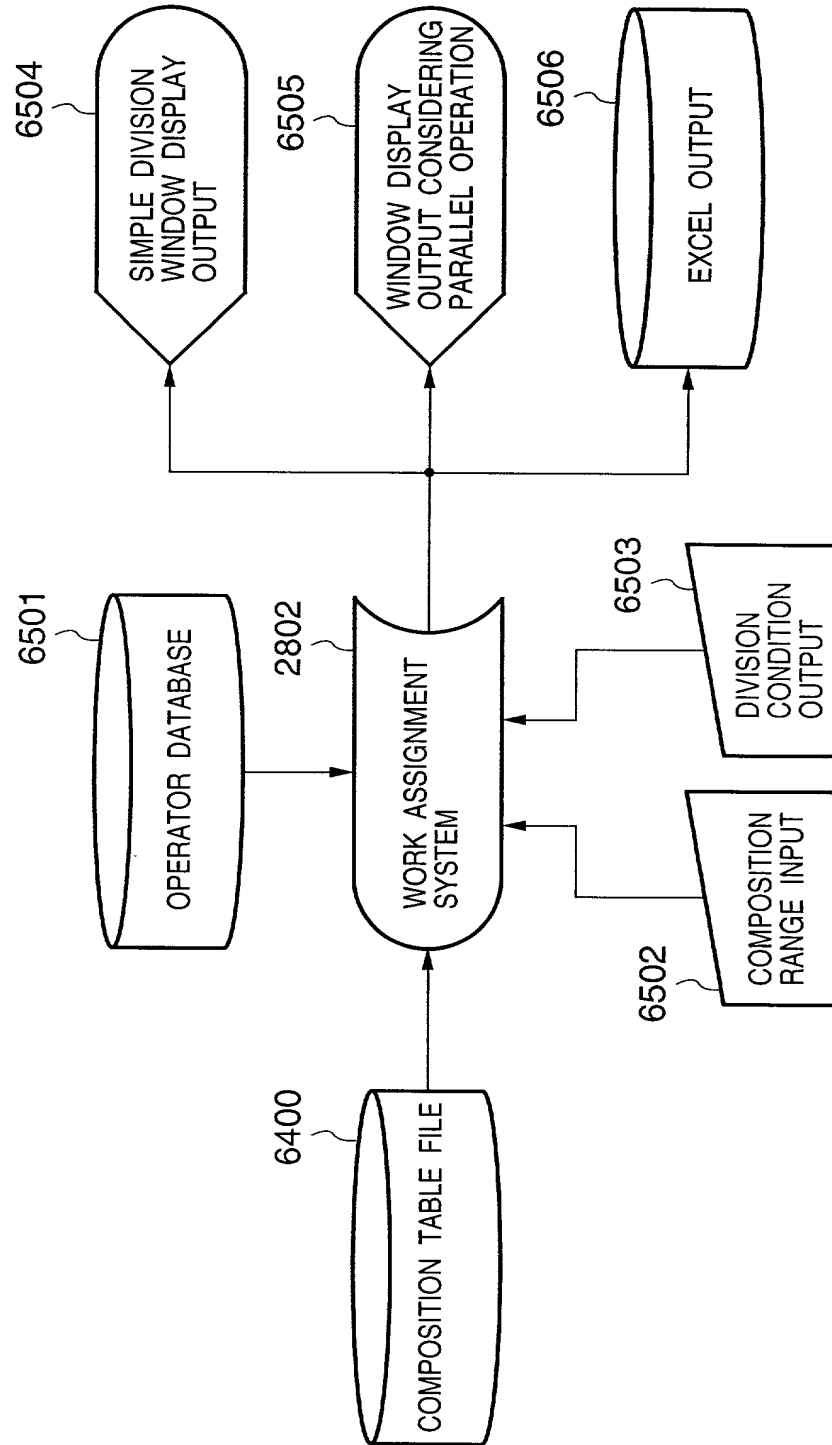


FIG. 65



It is to be understood that the present invention is not limited to the specific details shown and described herein.

FIG. 66

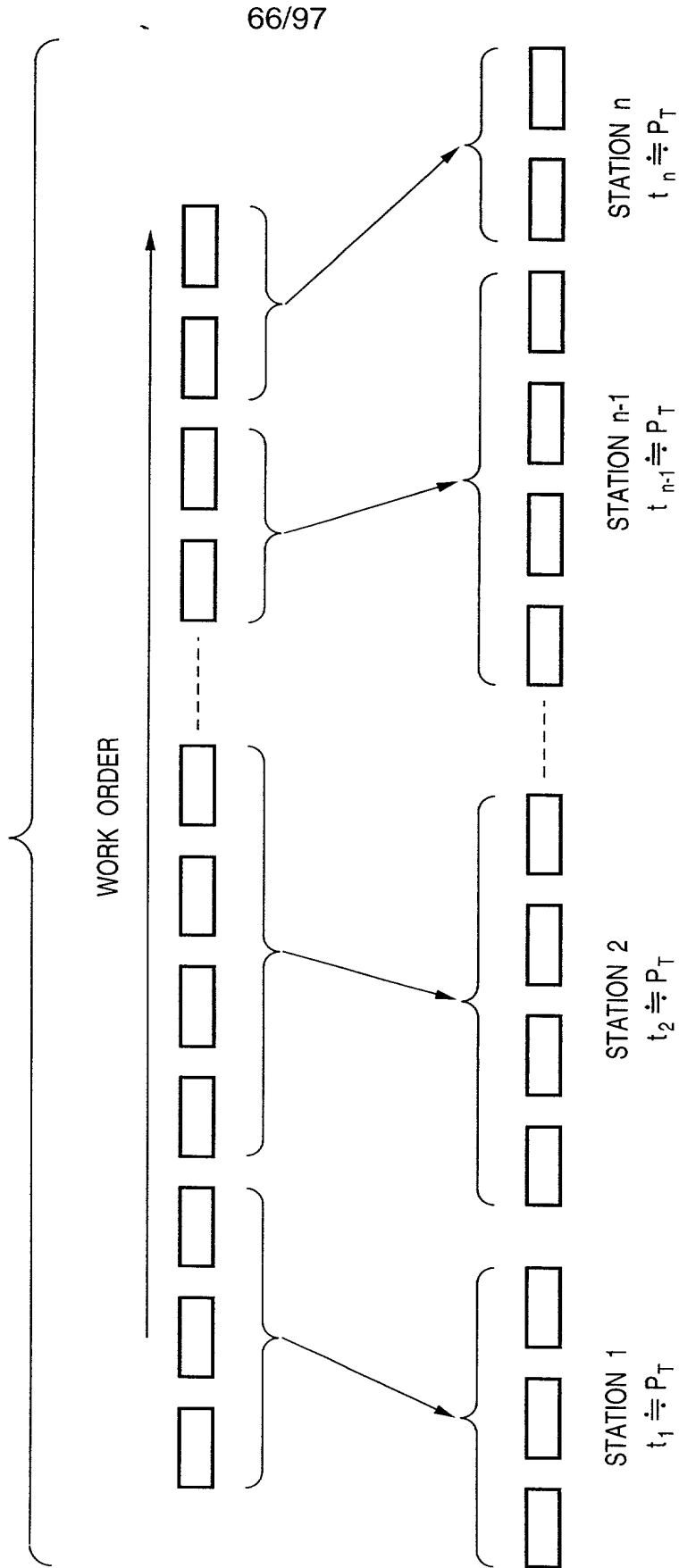


FIG. 68

SIMPLE DIVISION

		▼	▲
	FILE(F) EDIT(E)		◆
St 1			
0001	STICK HANDY CUT TAPE	134	
0002	SET LABELS ON MAIN BODY	550	
0003	WEIMAN REMOVAL	270	
St 2			
0004	ASSEMBLE OUTER CASE	365	
0005	FIT TOP PAD	268	
0006	STICK LARGE-SIDE ORDER LABEL	117	
⋮			

FIG. 69

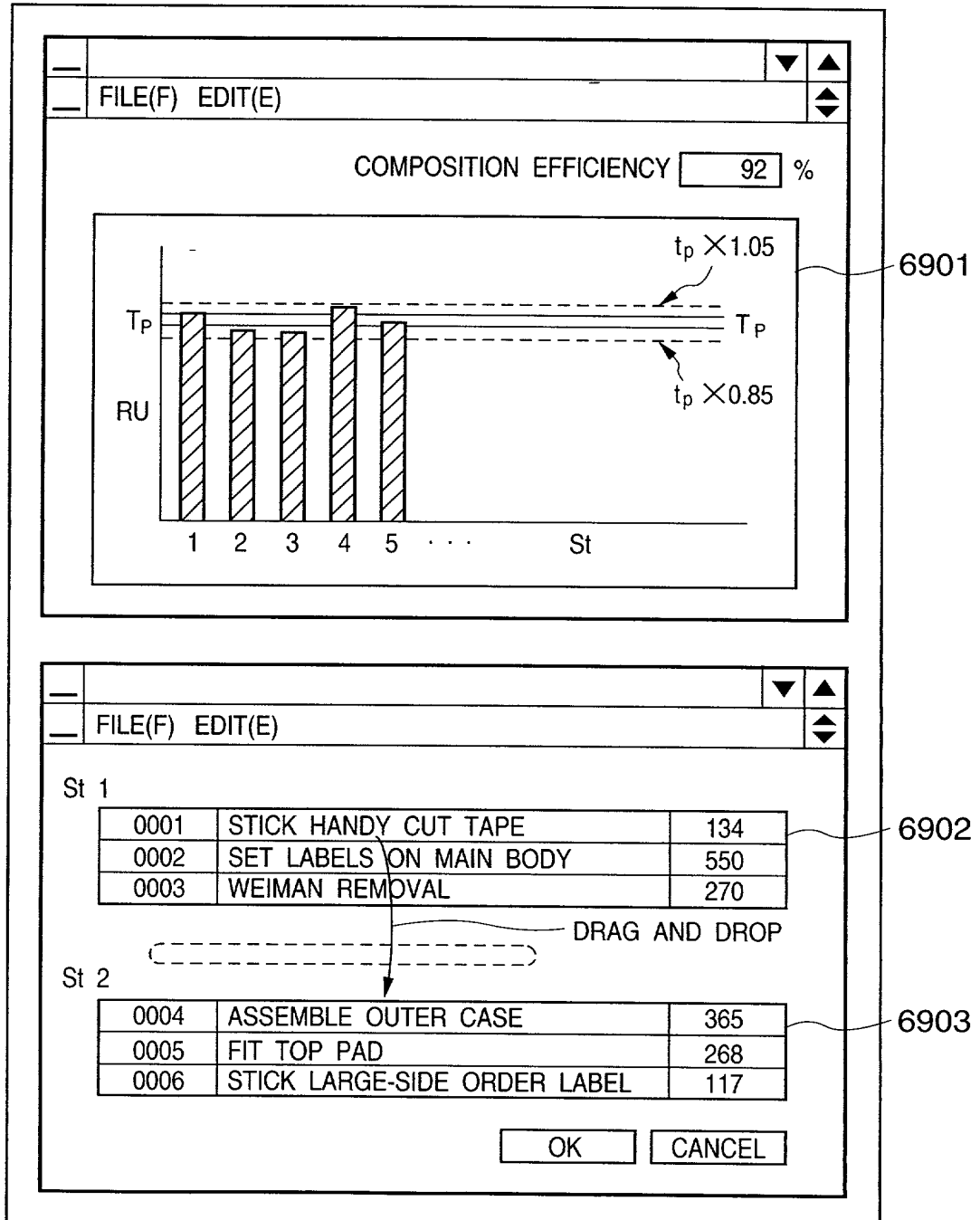


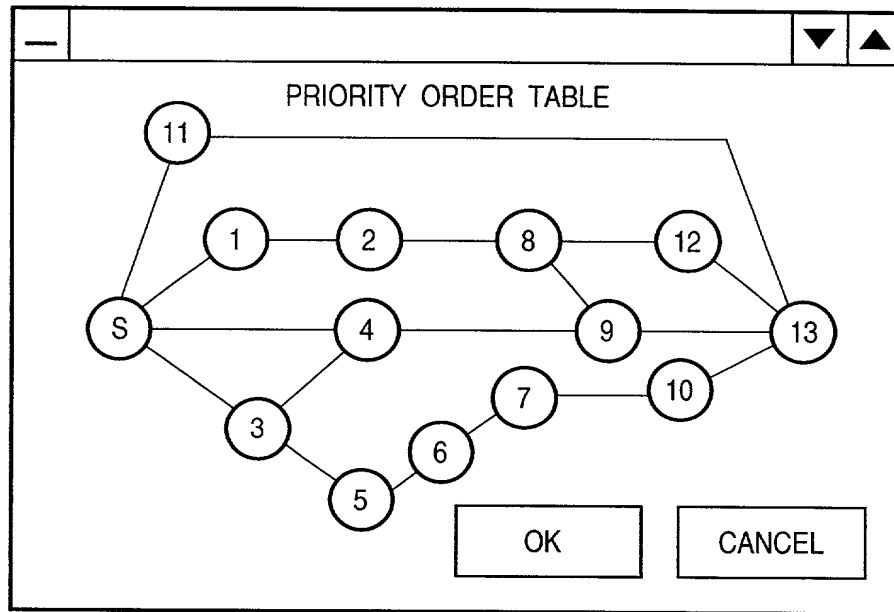
FIG. 70

FIG. 71

PARALLEL DIVISION

				▼	▲
PLAN 2		PLAN 1			
St 1		St 1			
1		1	STICK HANDY CUT TAPE	99	
2		2	SET LABELS ON MAIN BODY	78	
8		3	WEIMAN REMOVAL	134	
St 2		St 2			
3		4	ASSEMBLE OUTER CASE	732	
4		5	FIT TOP PAD	268	
5		6	STICK LARGE-SIDE ORDER LABEL	117	
			⋮		

FIG. 72

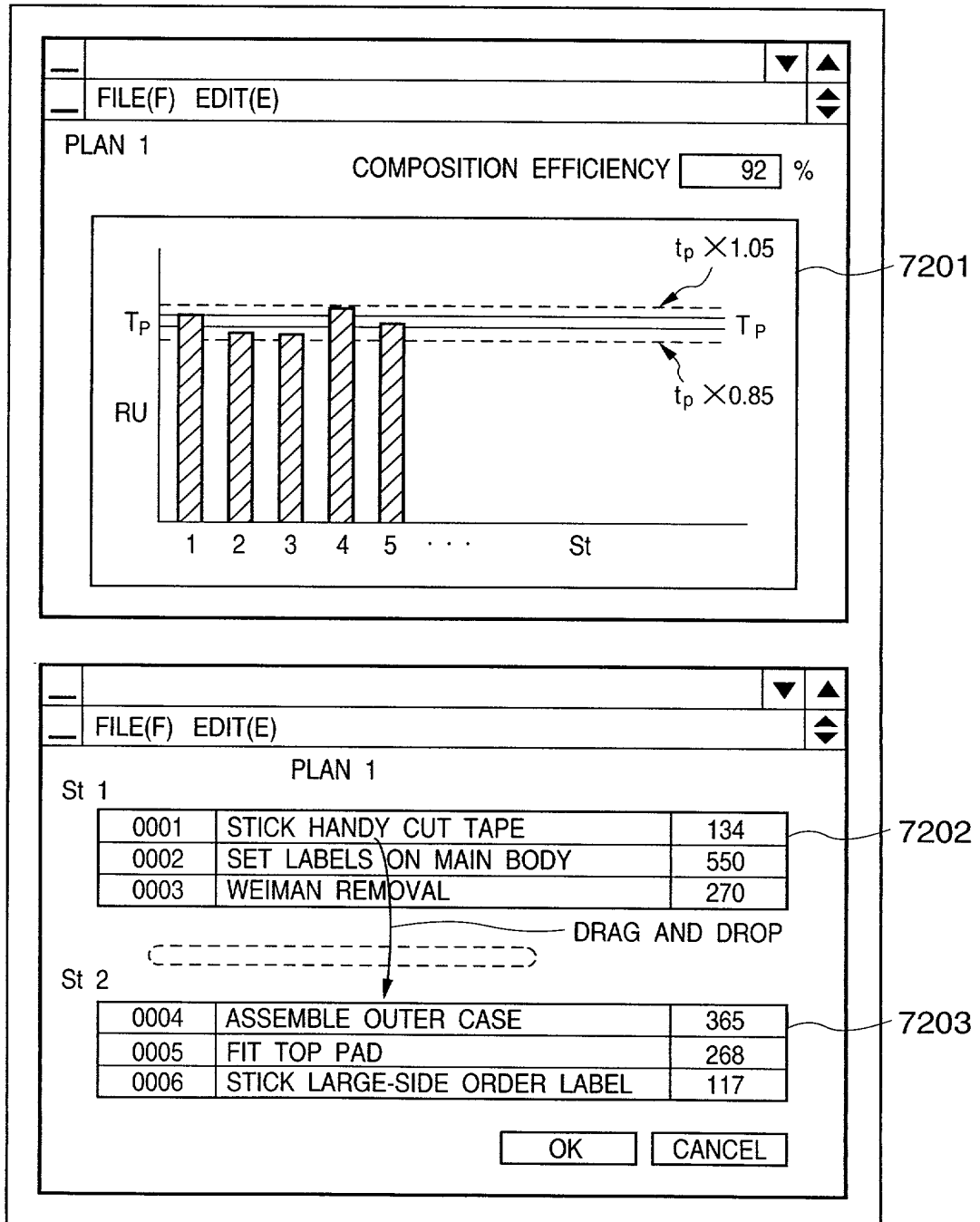


FIG. 73

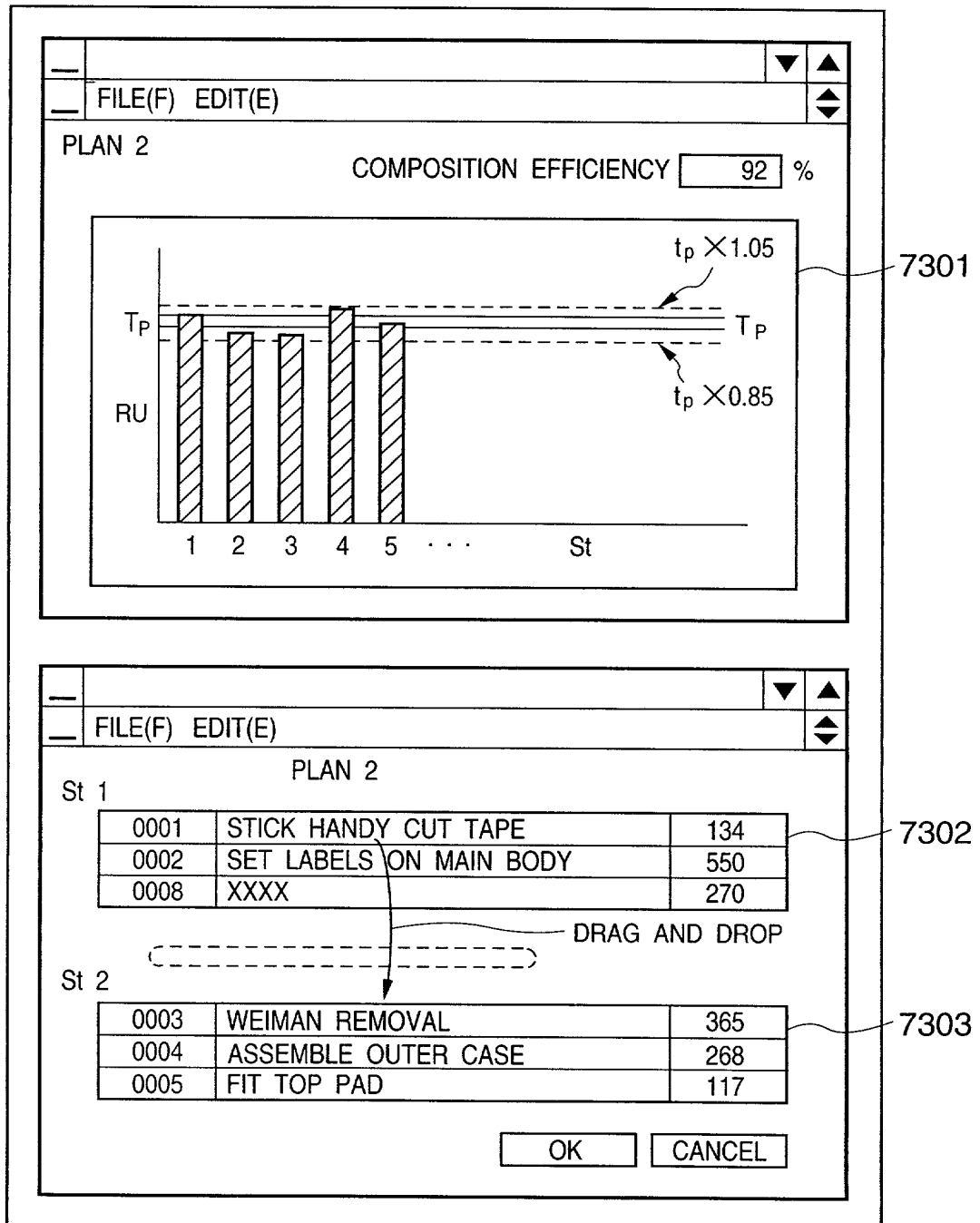


FIG. 74 is a block diagram of a computer system 7400, which includes a processor 7401, a memory 7402, a network interface 7403, a display 7404, and a user interface 7405. The processor 7401 is connected to the memory 7402, the network interface 7403, and the display 7404. The user interface 7405 is connected to the processor 7401 and the display 7404. The network interface 7403 is connected to a network 7406. The display 7404 displays a graphical user interface 7407, which includes a window 7408. The window 7408 includes a title bar 7409, a menu bar 7410, and a main area 7411. The menu bar 7410 includes a file menu 7412, an edit menu 7413, a view menu 7414, and a help menu 7415. The main area 7411 includes a text area 7416, a status bar 7417, and a toolbar 7418. The toolbar 7418 includes a new button 7419, an open button 7420, a save button 7421, a print button 7422, and a delete button 7423. The status bar 7417 displays the current page number 7424 and the total number of pages 7425. The text area 7416 displays the text of the document 7426. The graphical user interface 7407 is used to interact with the computer system 7400.

FIG. 74

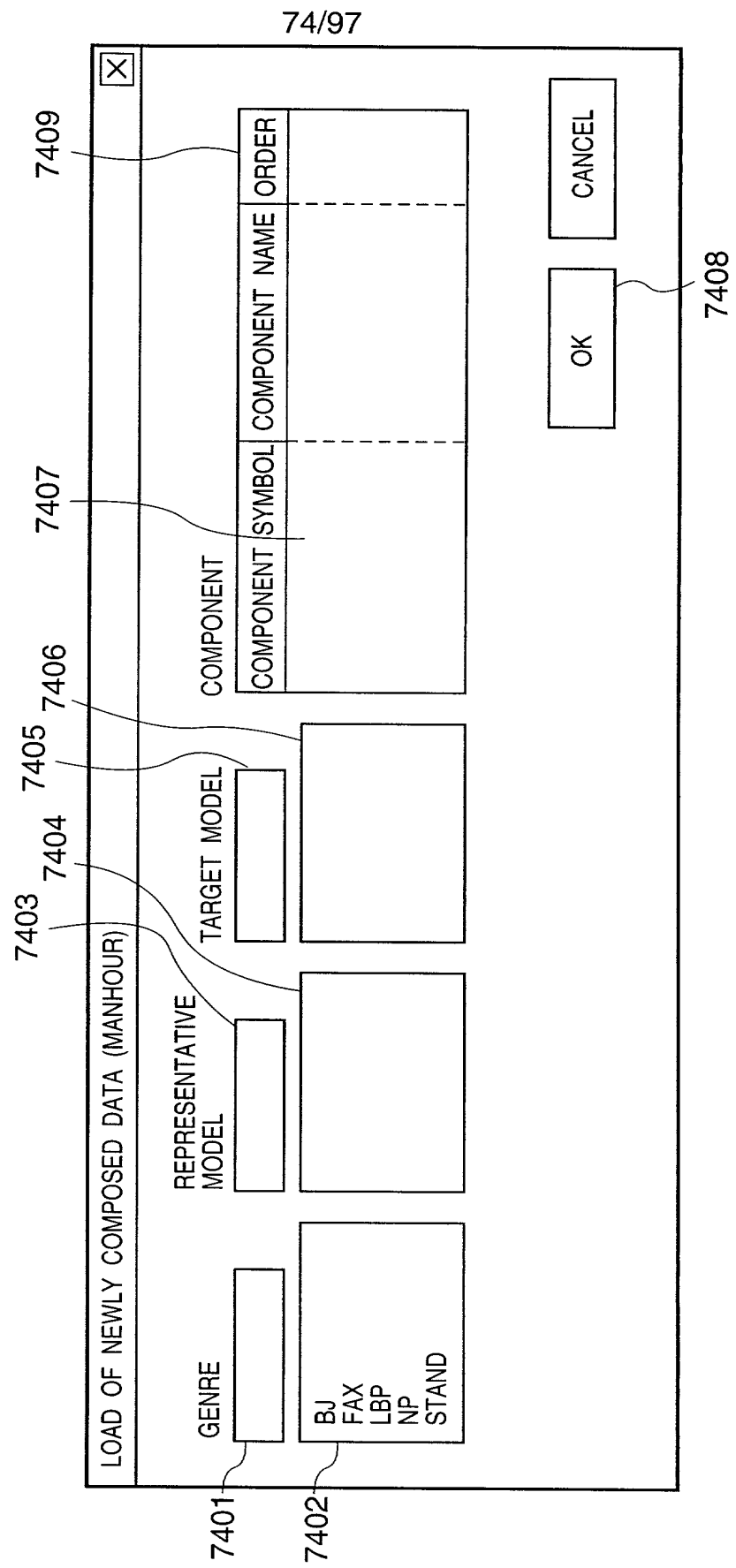
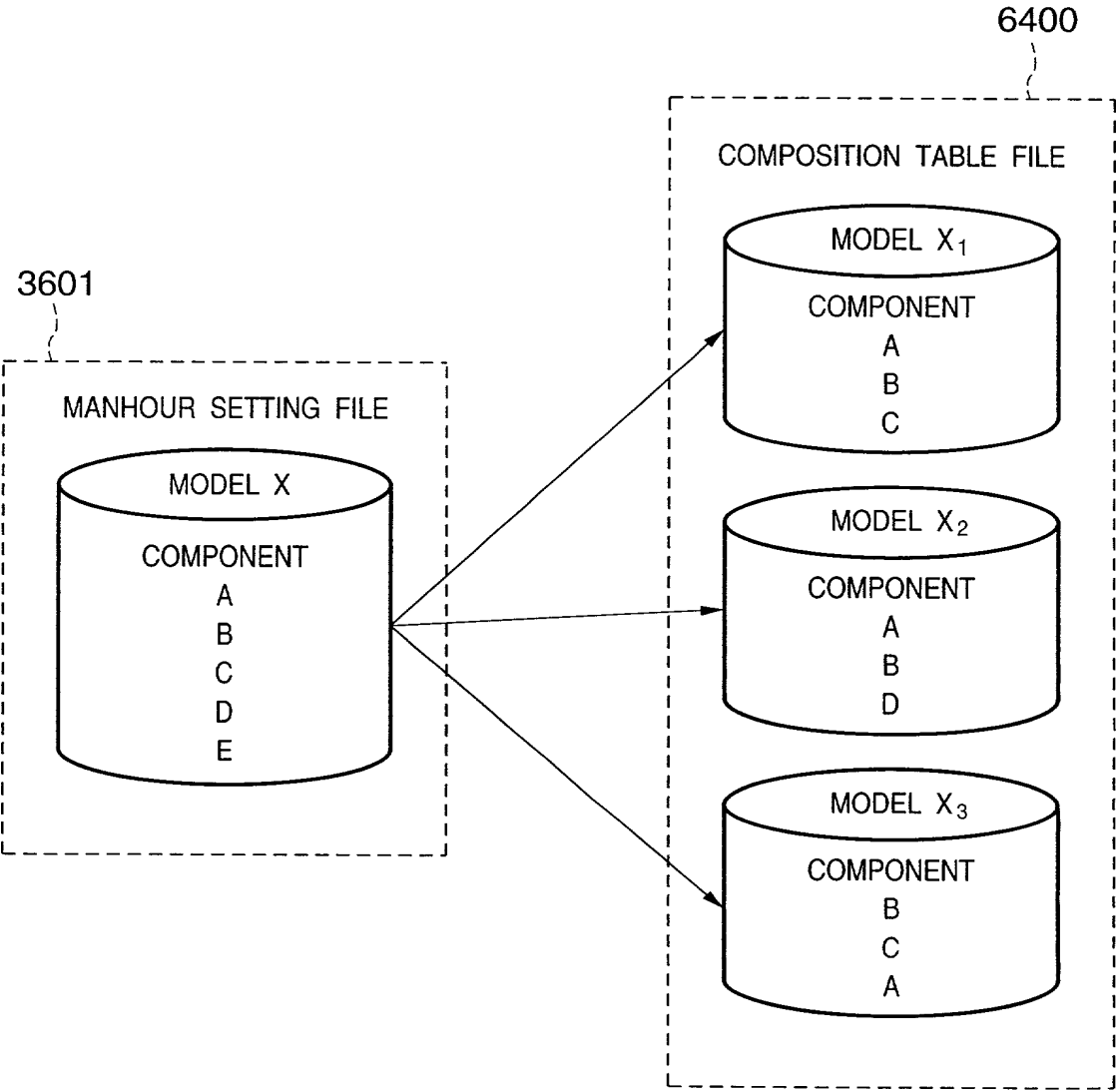


FIG. 75



(The following are the names of the persons who have been elected to the various offices of the Association, as reported by the Secretary.)

(The following are the names of the persons who have been elected to the various offices of the Association, as reported by the Secretary.)

FIG. 77

INPUT OF COMPOSITION DATA									
FILE(E) EDIT(E) TOOL(I)		OPTION(Q)							
COMPOSITION DATA				REVISION NUMBER		G			
TARGET MODEL				(COMPOSITION NAME)					
PER1000									
G NO.	WORK NAME	WF	MANUAL CHINE MANHOUR	SECTION	MA:	PROVISIONAL			
1	UNIT NAME	579	579	0	G	IN	SET		
0	FIRST WORK STANDARD NO.	WORK NAME	WF MANHOUR	MANUAL MANHOUR	MACHINE MANHOUR	PROVISIONAL MANHOUR	SEC- COMPONENT TION NAME	NO.	PRE- VIOUS
1	1 9000000000000000001E	単位名称s1	579	579	0	0	内 セット	1	0
1	2 90000000000000000001E	単位名称s2	54	54	0	0	内 セット	2	1
1	3 90000000000000000001E	単位名称s3	10	10	0	0	内 セット	3	2
1	4 90000000000000000001E	単位名称s4	50	50	0	0	内 セット	4	3
5	90000000000000000001E	単位名称u1	63	63	0	0	内 ユニット	5	4
27	900000000000000000027E	単位名称u23	55	55	0	0	内 ユニット	27	26
28	900000000000000000028E	単位名称u24	88	88	0	0	内 ユニット	28	27
29	900000000000000000029E	単位名称u25	147	147	0	0	内 ユニット	29	4
30	900000000000000000030E	単位名称u26	52	52	0	0	内 ユニット	30	29
31	900000000000000000031E	単位名称u27	55	55	0	0	内 ユニット	31	30
32	900000000000000000032E	単位名称u28	203	203	0	0	内 ユニット	32	28
33	900000000000000000033E	単位名称u29	66	66	0	0	内 ユニット	33	32
34	900000000000000000034E	単位名称u30	36	36	0	0	内 ユニット	34	

THE NUMBER OF WORKS IN COMPOSITION :		141	TOTAL : 11903 (RU)	TOTAL MANHOUR IN COMPOSITION : 11903 (RU)	TOTAL MANHOUR OUTSIDE WORKSHOP: 0 (RU)
TOTAL MANHOUR OUTSIDE COMPOSITION:		0 (RU)			

INPUT DATA		-- INPUT DATA --	
THE EXPECTED NUMBER OF PRODUCTS:	650 UNITS	7710a	
THE NUMBER OF DEFECTIVE PRODUCT:	0 UNITS	7710b	
THE NUMBER OF INITIAL PRODUCTS INVESTED INTO TOP OF ASSEMBLY LINE:	556 UNITS	7710c	
WORKING TIME:	450 MIN-UTES	7710d	
BREAK:	15 MIN-UTES	7720a	
MORNING MEETING TIME:	1 MIN-UTES	7720b	
EXERCISE TIME:	5 MIN-UTES	7720c	
LINE STOP TIME:	0 MIN-UTES	7720d	
OTHERS:	0 MIN-UTES		
OPERABLE TIME:	429 MIN-UTES		
EXPECTED COMPOSITION EFFICIENCY:	95 %		
CALCULATE			
OUTPUT DATA		-- OUTPUT DATA --	
STATION (ROUND DOWN)	18 St		
COMPOSITION EFFICIENCY	100 %		
STATION (ROUND UP)	19 St		
COMPOSITION EFFICIENCY	95 %		
THE NUMBER OF STATIONS	19 St		
COMPOSITION EFFICIENCY	95 %		
CALCULATION RESULT THE NUMBER OF STATIONS:	18.9 St		
PITCH TIME (tp)	660 RU		
EXECUTE COMPOSITION	END		

FIG. 78

INSERTION OF UNIT WORK

NEW WORK WILL BE INSERTED BEFORE
"STICK CHECK SHEET SERIAL NO."

INPUT WORK NAME AND PROVISIONAL MANHOUR VALUE

UNIT WORK NAME :

PROVISIONAL MANHOUR : (RU)

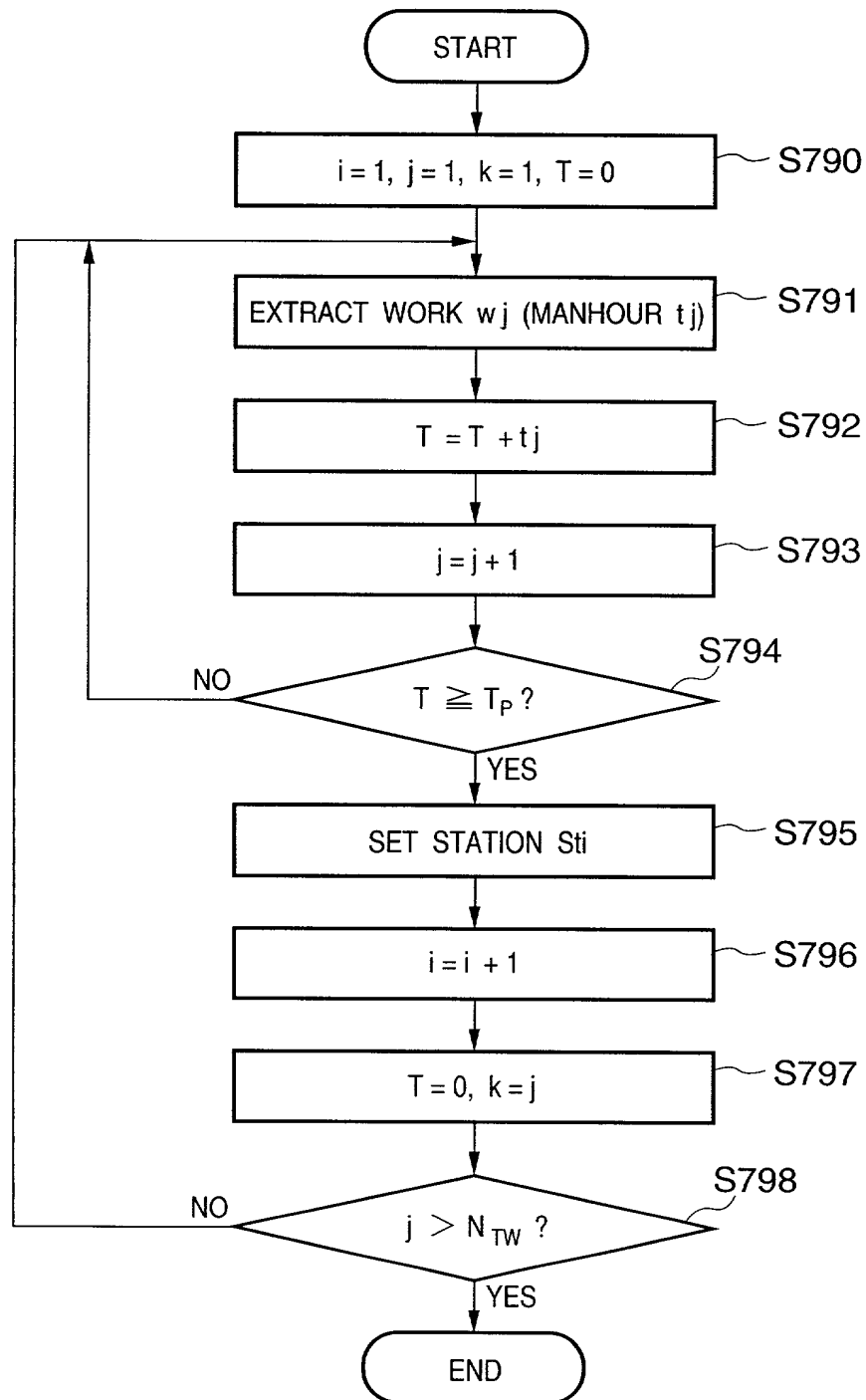
REMARKS :

OK CANCEL

7801

7802

FIG. 79



FILE(E) EDIT(E) VIEW(D) TOOL(T)

OPERATOR 1

OPERATOR 2

OPERATOR 3

OPERATOR 4

OPERATOR 5

S11

OPERATOR 1

WORK NAME	WF	PROV. SIONAL MANHOURL	MA-CHINE UAL
UNIT NAME1	59	0	9000
UNIT NAME2	54	0	9000
UNIT NAME3	10	0	9000
UNIT NAME4	50	0	9000

CLEAR(V)

xxxx

xxxx

xxxx

xxxx

DELETE STATION

xxxx

xxxx

S12

OPERATOR 2

WORK NAME	WF	PROV. SIONAL MANHOURL	MA-CHINE UAL
UNIT NAME1	63	0	9000
UNIT NAME2	30	0	9000
UNIT NAME3	156	0	9000
UNIT NAME4	35	0	9000

0001 xxx LOCK

201

0002 MIRROR SPRING

236

0003 xxx LOCK

285

0002 MIRROR SPRING

525

ATTACHMENT

S13

OPERATOR 3

WORK NAME	WF	PROV. SIONAL MANHOURL	MA-CHINE UAL
UNIT NAME9	144	0	9000
UNIT NAME10	16	0	9000
UNIT NAME11	293	0	9000
UNIT NAME12	133	0	9000

S14

OPERATOR 4

WORK NAME	WF	PROV. SIONAL MANHOURL	MA-CHINE UAL
UNIT NAME13	33	0	9000
UNIT NAME14	72	0	9000
UNIT NAME15	35	0	9000
UNIT NAME16	56	0	9000
UNIT NAME17	150	0	9000
UNIT NAME18	16	0	9000
UNIT NAME19	250	0	9000

S15

OPERATOR 5

WORK NAME	WF	PROV. SIONAL MANHOURL	MA-CHINE UAL
UNIT NAME20	250	0	9000
UNIT NAME21	0	0	9000
UNIT NAME22	50	0	9000
UNIT NAME23	55	0	9000
UNIT NAME24	88	0	9000
UNIT NAME25	147	0	9000
UNIT NAME26	52	0	9000
UNIT NAME27	55	0	9000

TOTAL 693 (RU)

PF 105.0%

TOTAL 609 (RU)

PF 92.3%

TOTAL 566 (RU)

PF 86.8%

TOTAL 596 (RU)

PF 90.3%

TOTAL 565 (RU)

PF 85.8%

900

520

540

360

180

0

1

2

3

4

5

G STANDARD NO.

1

WORK NAME

UNIT NAMEa1

WF MEANS

MA-CHINE

PROVISIONAL MANHOURL

0

REMARKS

COMPOSITION MODE: PRIORITY ORDER SCHEME

COMPOSITION EFFICIENCY

94.92 %

NET COMPOSITION EFFICIENCY

8007

8006

8007

94.92%

[illegible]

COMPOSITION MODE: PRIORITY ORDER SCHEME

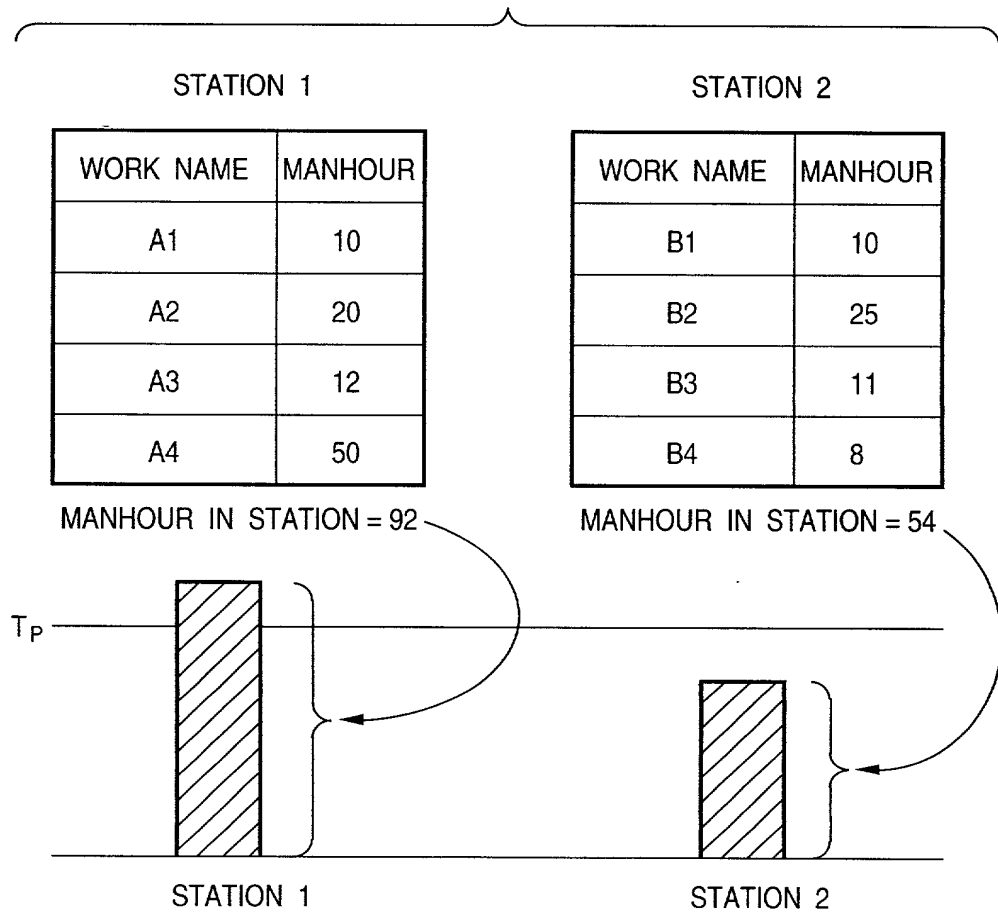
FIG. 81

FIG. 82

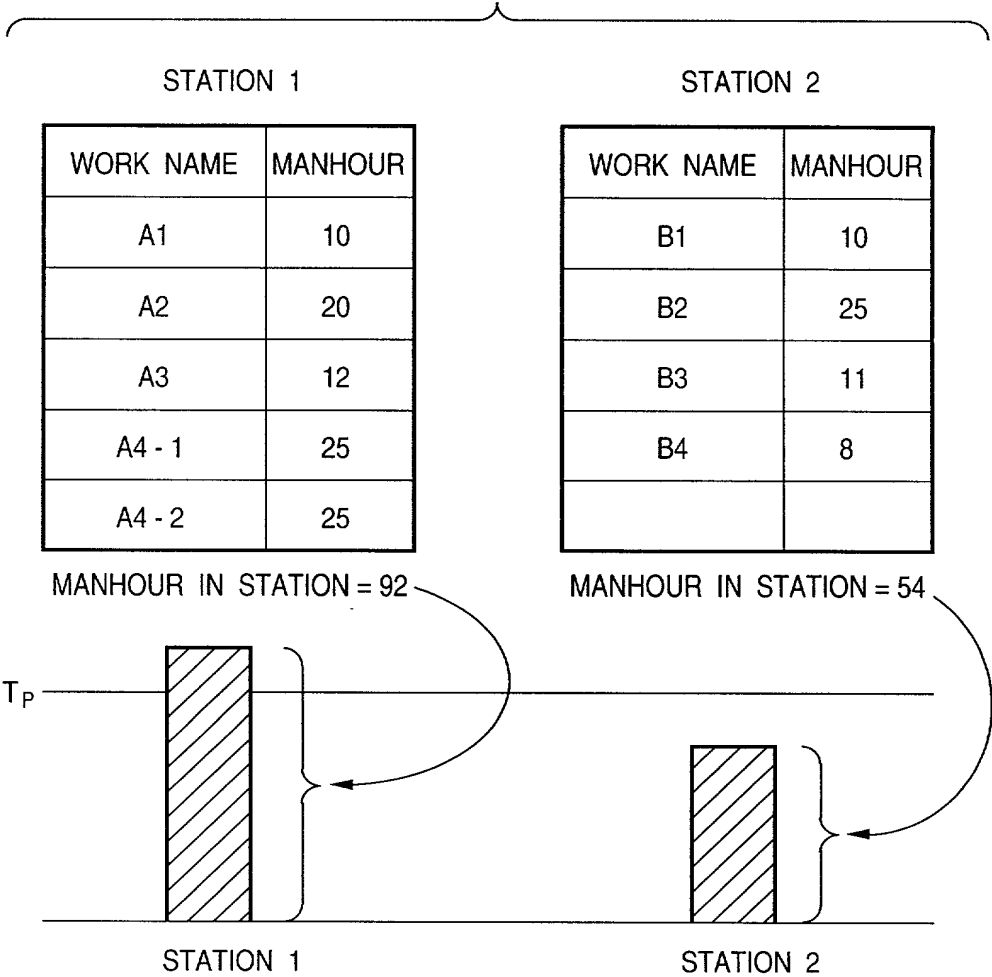


FIG. 83

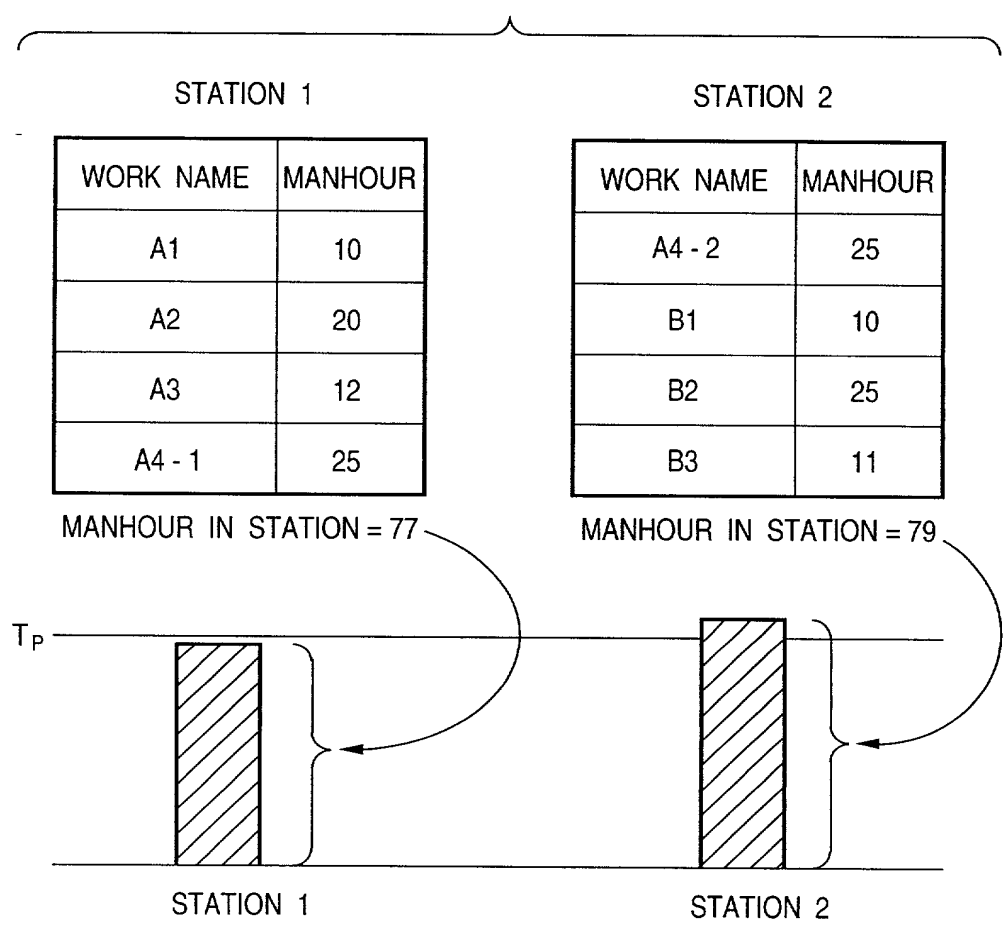


FIG. 84

PARALLEL OPERATION / INTEGRATION OF STATIONS

TARGET STATION : 1

8401

THE NUMBER OF STATIONS

2

8402

OK

CANCEL

FIG. 85

FILE(F) EDIT(E) VIEW(V) TOOL(T)

OPERATOR 1

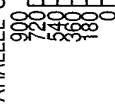
S1

WORK NAME	WF	PROV. SIONAL MANHOURL	MA- CHINE UAL
UNIT WORK NAME 1	34	10	No.01
UNIT WORK NAME 2	255	46	No.02
UNIT WORK NAME 6	92	26	No.06
UNIT WORK NAME 7	52	0	No.07
UNIT WORK NAME 8	52	0	No.06
UNIT WORK NAME 9	0	36	No.09

TOTAL 585 (RU)

PF 83.6%

PARALLEL STATIONS



--- tp
 --- tp*1.05
 --- tp*0.85
 --- t

OPERATOR 3

S3

WORK NAME	WF	PROV. SIONAL MANHOURL	MA- CHINE UAL
UNIT WORK NAME 3	156	0	No.03
UNIT WORK NAME 4	34	0	No.04
UNIT WORK NAME 5	138	23	No.06
UNIT WORK NAME 10	71	48	No.10
UNIT WORK NAME 11	138	30	No.11
UNIT WORK NAME 12	97	20	No.12
UNIT WORK NAME 13	88	0	No.14
UNIT WORK NAME 14	46	18	No.15
UNIT WORK NAME 15	546	15	No.16
UNIT WORK NAME 16	58	20	No.17

TOTAL 1548 (RU) xxxxxx

PF 23.5%

OPERATOR 4

S4

WORK NAME	WF	PROV. SIONAL MANHOURL	MA- CHINE UAL
UNIT WORK NAME 19	84	26	No.19
UNIT WORK NAME 20	120	20	No.20
UNIT WORK NAME 21	310	66	No.21

TOTAL 623 (RU)

PF 95.2%

OPERATOR 5

S5

WORK NAME	WF	PROV. SIONAL MANHOURL	MA- CHINE UAL
UNIT WORK NAME 22	146	71	No.22
UNIT WORK NAME 23	106	26	No.23
UNIT WORK NAME 24	61	0	No.24
UNIT WORK NAME 25	51	10	No.25
END	0	0	No.X

TOTAL 486 (RU)

PF 73.6%

G STANDARD NO. WORK NAME

WF MEANS MA- CHINE MANHOURL

COMPOSITION EFFICIENCY %
 NET COMPOSITION EFFICIENCY %

COMPOSITION MODE : PRIORITY ORDER SCHEME

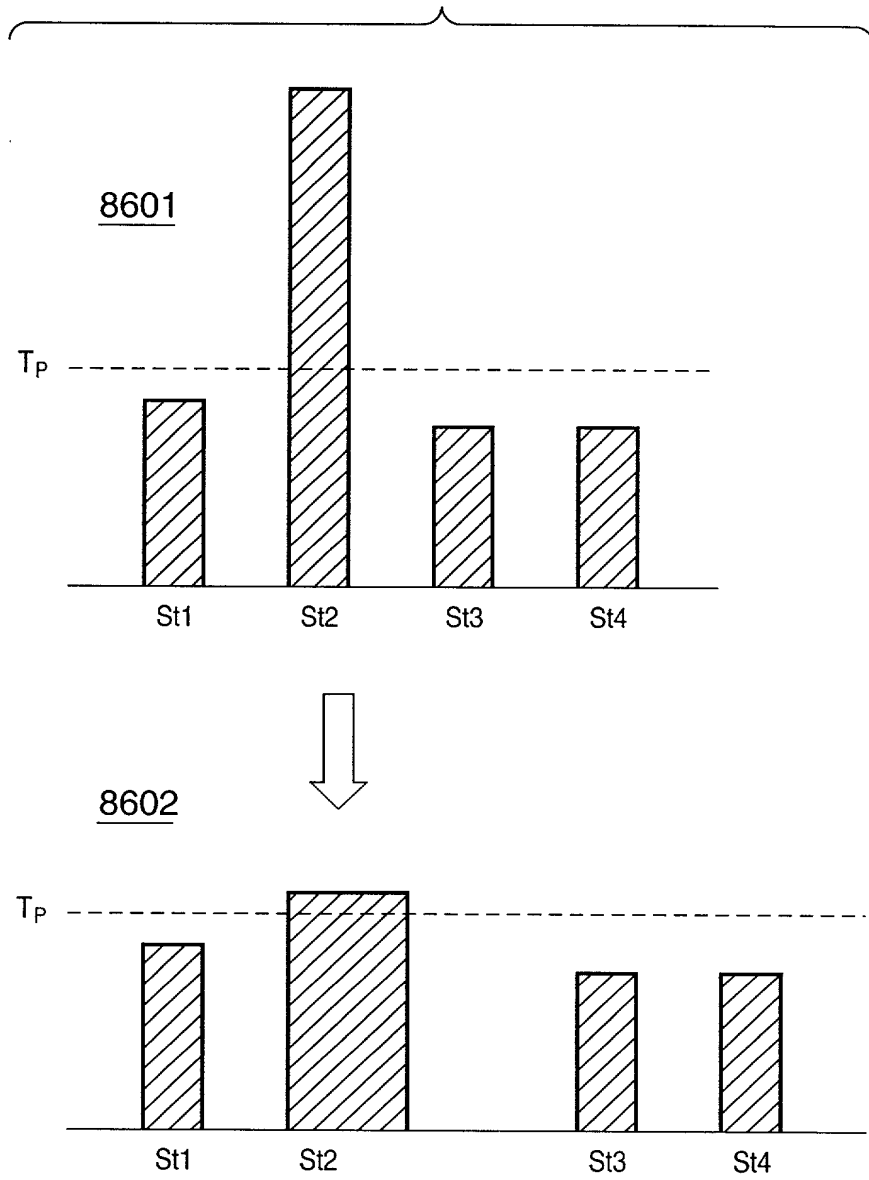
FIG. 86

FIG. 87

A diagram of a 'USER REGISTRATION' dialog box. The dialog box has a title bar with a close button (X). Inside, there are five input fields and two buttons. The fields are labeled on the left: 'NAME CODE', 'NAME', 'POSITION', 'PASSWORD', and 'AUTHORITY'. The 'NAME' field is split into two boxes containing '田中' and '一郎'. The 'POSITION' field is a dropdown menu showing 'kumitate'. The 'PASSWORD' field contains '12345'. The 'AUTHORITY' field is empty. At the bottom are 'OK' and 'CANCEL' buttons. On the right side, there are five reference numerals (8701, 8702, 8703, 8704, 8705) with lines pointing to the input boxes for Name Code, Name, Position, Password, and Authority respectively.

USER REGISTRATION

NAME CODE : 12345 8701

NAME : 田中 一郎 8702

POSITION : kumitate 8703

PASSWORD : 12345 8704

AUTHORITY : 8705

OK CANCEL

FIG. 88 is a block diagram of a system for creating and managing work standard data. The system includes a central processing unit (CPU) 8801, a memory unit (MEM) 8802, a work standard creation system (WCS) 8803, a work standard setting system (WSS) 8804, a work assignment system (WAS) 8805, and a work standard group (WSG) 8806. The WCS 8803 is connected to the CPU 8801 and the MEM 8802. The WSS 8804 is connected to the WCS 8803 and the WSG 8806. The WAS 8805 is connected to the WSS 8804 and the WSG 8806. The WSG 8806 is connected to the CPU 8801 and the MEM 8802. The WSG 8806 is also connected to a network (LAN) 8807, which is connected to a plurality of workstations (ST1, ST2, ..., STn).

FIG. 88

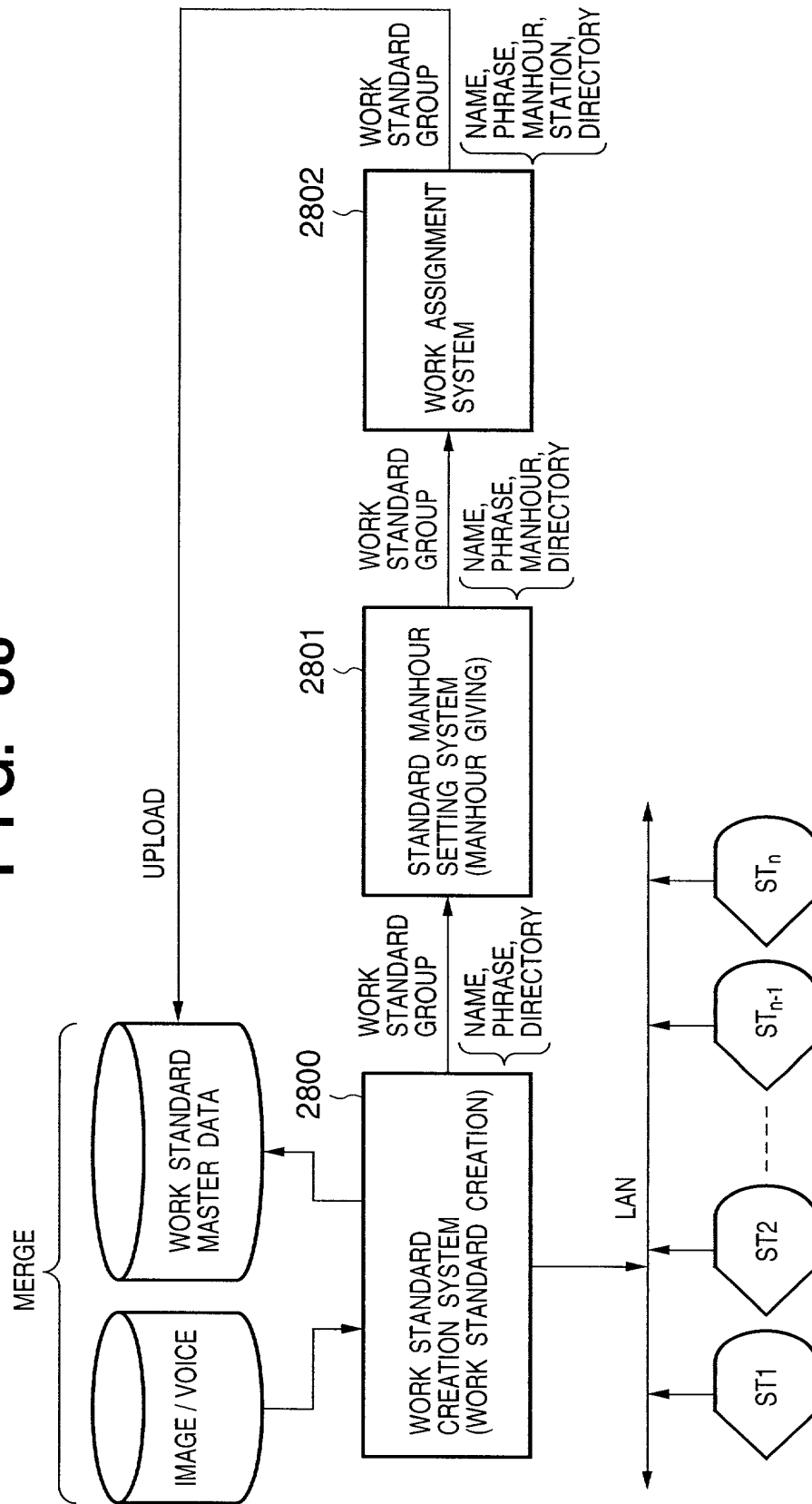


FIG. 89

DIRECTORY NAME	IMAGE DATA	OPERATION (VERB)	PARAMETER 1	PARAMETER 2	PARAMETER 3
xxxxxx1	SCREW	SCREW	SCREW CLOCKWISE	DISTANCE MOVEMENT 10mm	TORQUE 10Kg.M
xxxxxx2	SCREW	SCREW	SCREW CLOCKWISE	DISTANCE MOVEMENT 20mm	TORQUE 20Kg.M
xxxxxx3	SCREW	SCREW	SCREW CLOCKWISE	DISTANCE MOVEMENT 20mm	TORQUE 30Kg.M
...
yyyyyy1	ROTATE	ROTATE	CLOCKWISE	DISTANCE MOVEMENT 20mm	
yyyyyy2	ROTATE	ROTATE	COUNTERCLOCKWISE	DISTANCE MOVEMENT 20mm	
...
zzzzzz1	OPEN	OPEN	OPEN UPWARD	DISTANCE MOVEMENT 30mm	WEIGHT 100g
zzzzzz2	OPEN	OPEN	OPEN DOWNWARD	DISTANCE MOVEMENT 40mm	WEIGHT 200g
...

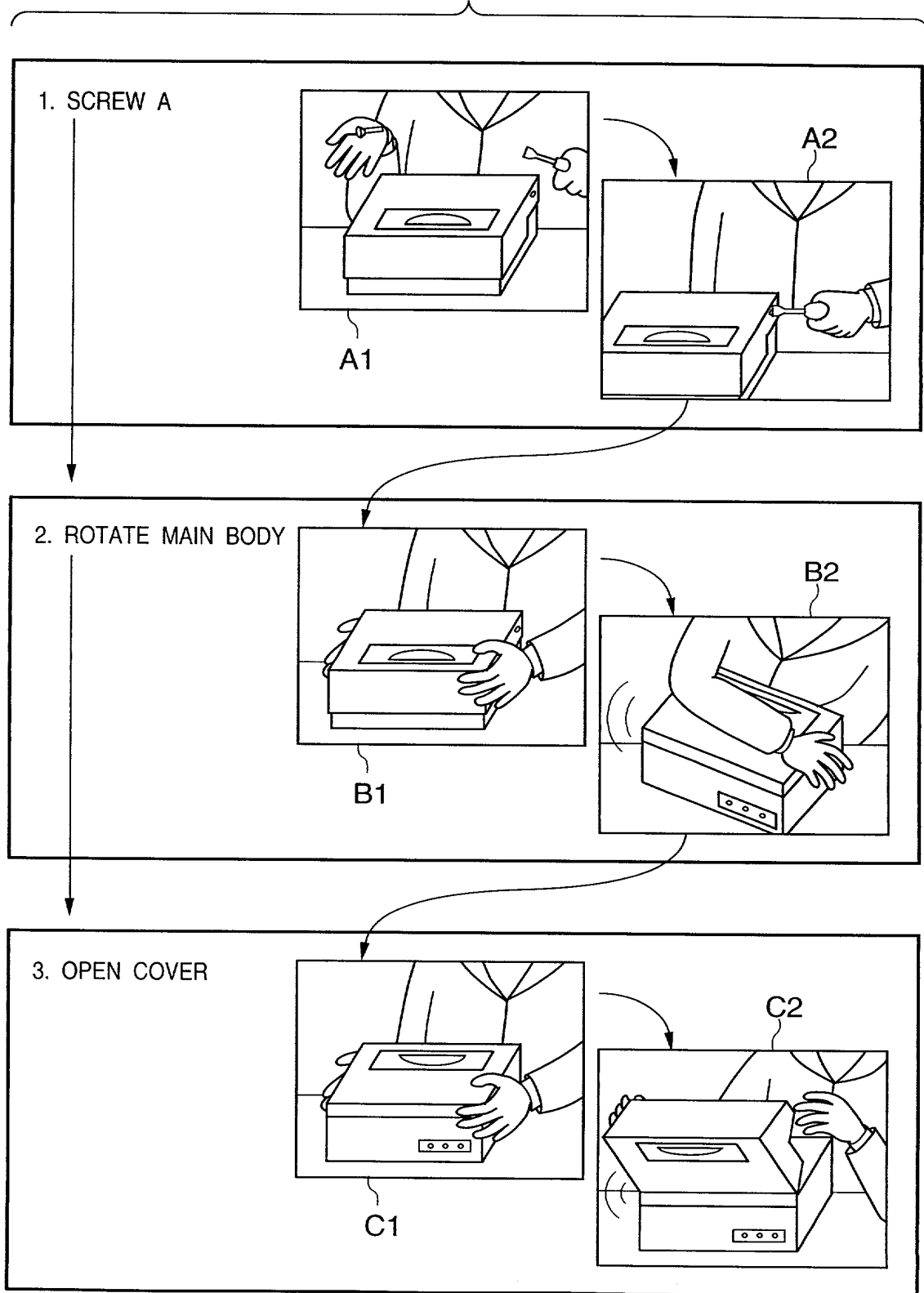
FIG. 90

FIG. 91

9101

9102

SETTING OF COMPONENT SYMBOL

PRODUCT SYMBOL : BJ - 970909

COMPONENT SYMBOL : CH

COMPONENT NAME : CHECK

OK

SEARCH COMPONENT

CANCEL

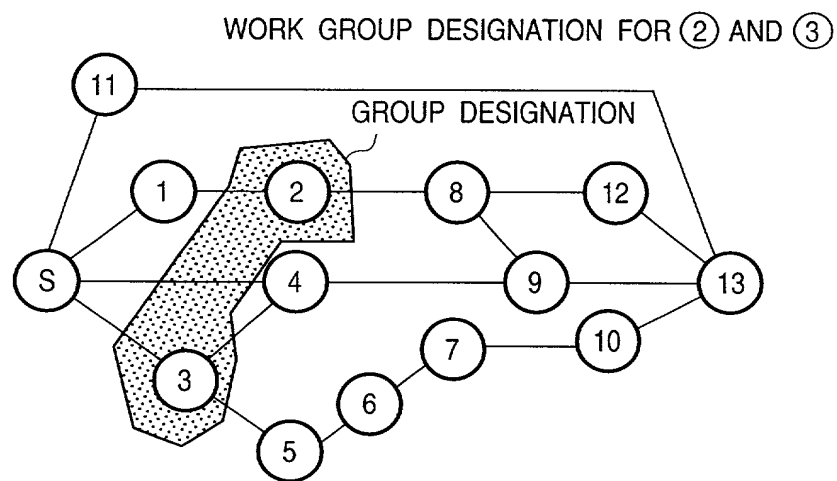
FIG. 92

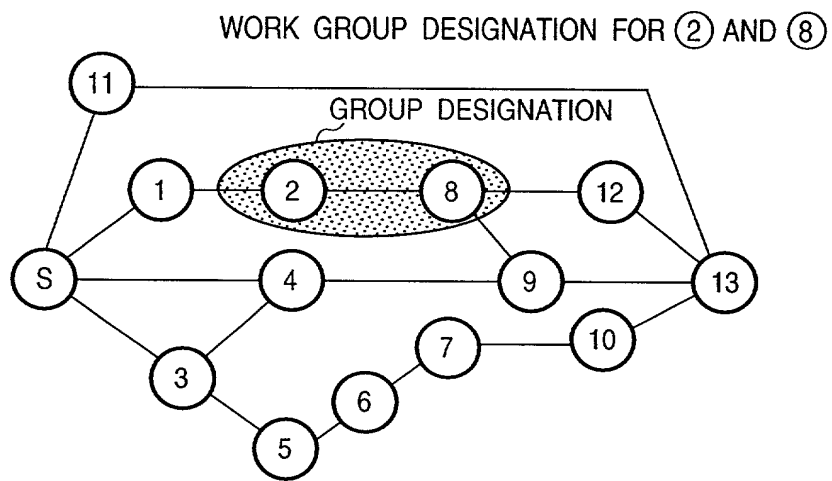
FIG. 93

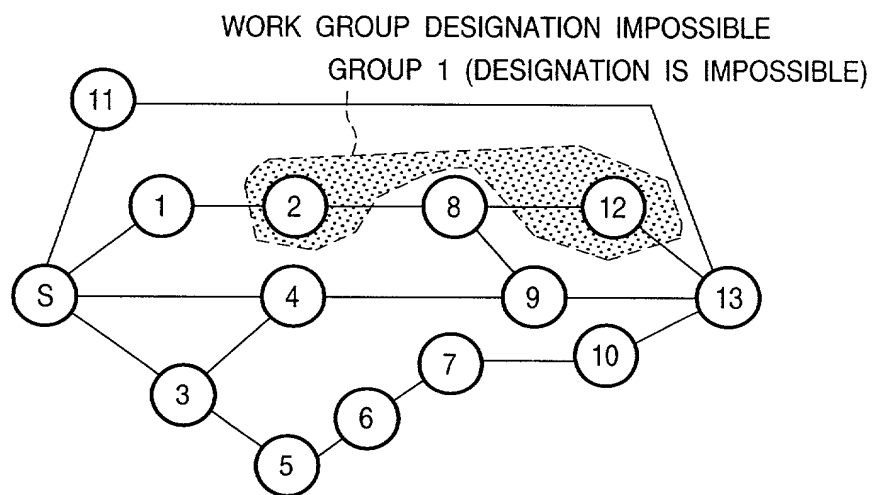
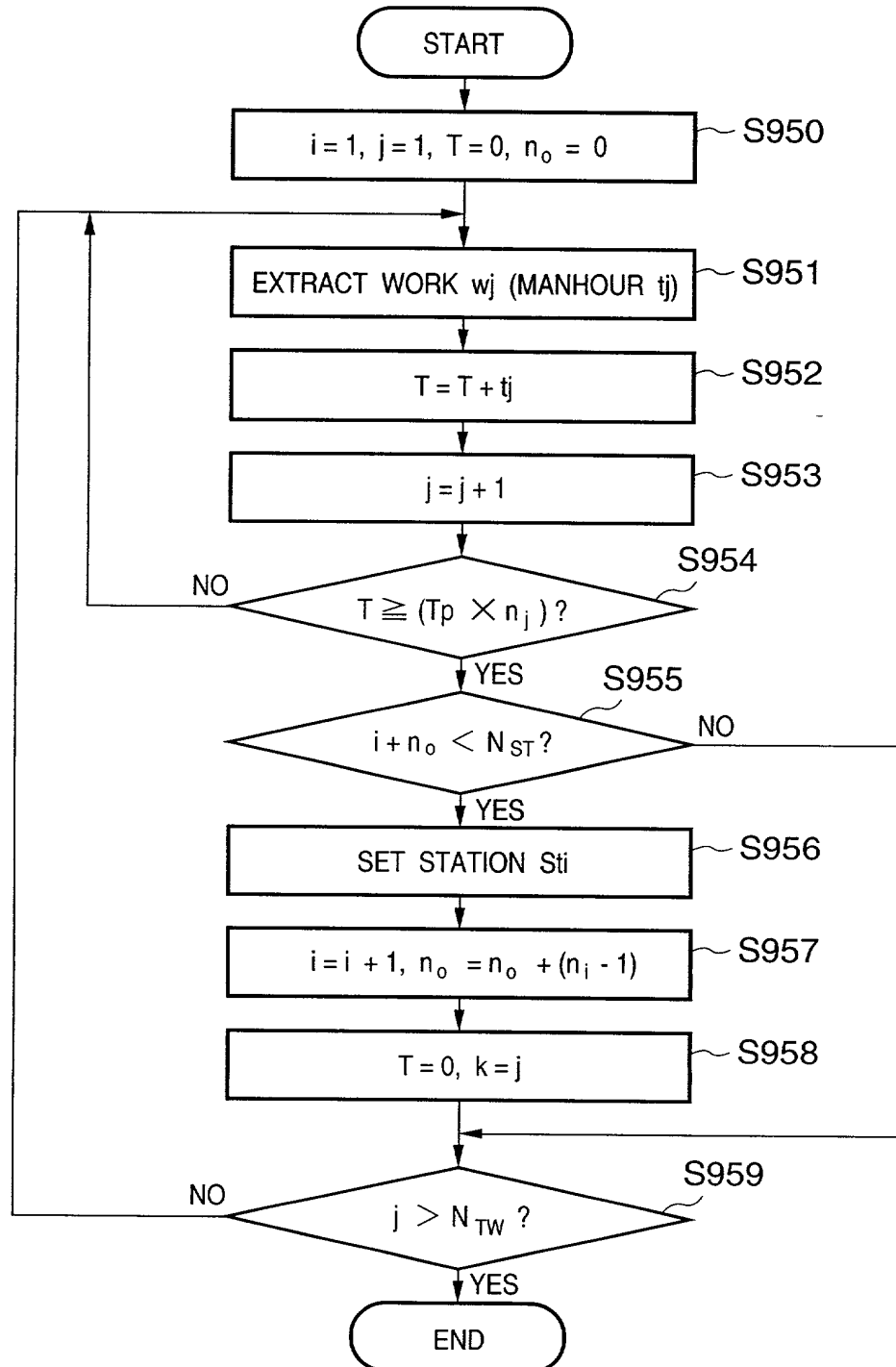
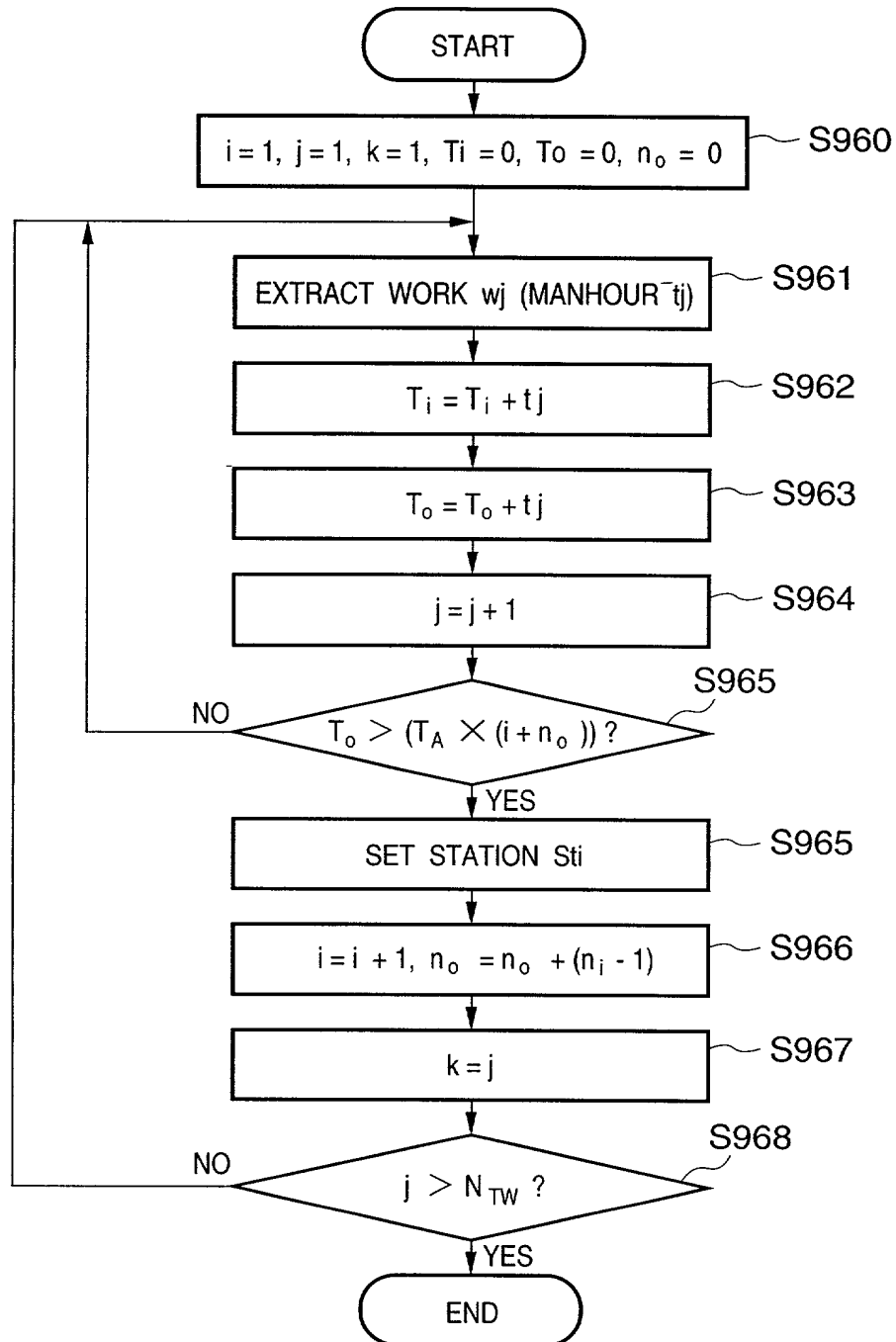
FIG. 94

FIG. 95

N_{ST} : THE NUMBER OF STATIONS
 n_i : i STATION PARALLEL NUMBER
 n_o : TOTAL ACCUMULATED PARALLEL SUM NUMBER

FIG. 96

N_{ST} : THE NUMBER OF STATIONS

T_i : i STATION MANHOUR

T_A : STATION MANHOUR AVERAGE VALUE

$$T_A = WF / N_{ST}$$

T_o : TOTAL ACCUMULATED MANHOUR

n_i : i STATION PARALLEL NUMBER

n_o : TOTAL ACCUMULATED PARALLEL SUM NUMBER

FIG. 97

FILE(E) EDIT(E) VIEW(D) TOOL(I)

OPERATOR 1 OPERATOR 2 OPERATOR 3 OPERATOR 4 OPERATOR 5 OPERATOR 6

S11 S12 S13 S14 S15

WORK NAME	WF	PROV- SIONAL MANHOUR	MA- CHINE UAL	MAN- UAL
START	0	0	No.	No.
UNIT WORK NAME 1	34	10	No.01	
UNIT WORK NAME 2	255	46	No.02	
UNIT WORK NAME 6	92	26	No.06	
UNIT WORK NAME 7	52	0	No.07	
UNIT WORK NAME 8	52	0	No.08	
UNIT WORK NAME 9	0	36	No.09	
UNIT WORK NAME 3	156	0	No.03	
UNIT WORK NAME 4	34	0	No.04	
UNIT WORK NAME 5	138	23	No.06	
UNIT WORK NAME 10	71	48	No.10	
UNIT WORK NAME 11	138	30	No.11	
UNIT WORK NAME 12	97	20	No.12	
UNIT WORK NAME 13	88	0	No.14	
UNIT WORK NAME 14	46	18	No.15	
UNIT WORK NAME 15	546	15	No.16	
UNIT WORK NAME 16	58	20	No.17	
UNIT WORK NAME 19	84	26	No.19	
UNIT WORK NAME 20	120	20	No.20	
UNIT WORK NAME 21	310	66	No.21	
UNIT WORK NAME 22	146	71	No.22	
UNIT WORK NAME 23	106	26	No.23	
UNIT WORK NAME 24	61	0	No.24	
UNIT WORK NAME 25	51	10	No.25	
END	0	0	No.X	

TOTAL 585 (RU) PF 83.6% PARALLEL STATIONS PF 117.3%

PARALLEL STATIONS

900
720
540
360
180
0

1 2 3 4 5

G STANDARD NO. WORK NAME

WF MEANS MA- CHINE MANHOUR

PROVISIONAL REMARKS

COMPOSITION MODE: PRIORITY ORDER SCHEME

COMPOSITION EFFICIENCY % 96.43 %

NET COMPOSITION EFFICIENCY %

TOTAL 486 (RU) PF 73.6%

TOTAL 6238 (RU) PF 95.2%

TOTAL 572 (RU) PF 96.7%